

# **ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES IN THE STATE OF NEW YORK**

## **PRELIMINARY SITE ASSESSMENT Volume 1**

**Salina Town Landfill Site  
Site Number 734036  
Town of Salina, Onondaga County**

**May 1994**



Prepared for:

**New York State Department  
of Environmental Conservation**

50 Wolf Road, Albany, New York 12233  
*Langdon Marsh, Acting Commissioner*

**Division of Hazardous Waste Remediation**

*Michael J. O'Toole, Jr., P.E., Director*

Prepared by:

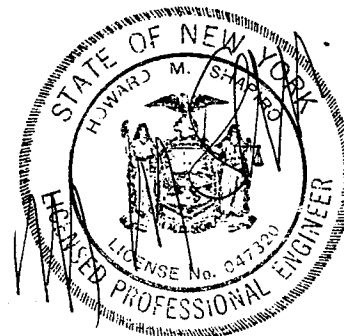
**Ecology and Environment Engineering, P.C.**

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**ecology and environment  
engineering, p.c.**

**BUFFALO CORPORATE CENTER**  
368 PLEASANTVIEW DRIVE, LANCASTER, NEW YORK 14086, TEL. 716/684-8060

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## **EXECUTIVE SUMMARY**

Under the New York State Department of Environmental Conservation (NYSDEC) Superfund Standby Contract, Joseph C. Lu, P.E., P.C. (JCL), a subcontractor to Ecology and Environment Engineering, P.C. (E & E), conducted a preliminary site assessment (PSA) investigation at the Salina Town Landfill site (site number 734036).

The Salina Town Landfill site is located on New York State Route 11 (Wolf Street) in the Town of Salina, Onondaga County, New York. The site is listed on NYSDEC's Registry of Inactive Hazardous Waste Disposal sites as a 50-acre Class 2A site. This is a temporary classification assigned to sites that have inadequate and/or insufficient data to be classified otherwise.

The Salina Town Landfill site is a former municipal landfill used for the disposal of domestic, commercial, and industrial waste. The site stopped accepting municipal waste in 1975, but it was not covered and graded until 1982. Hazardous waste disposal has been documented at the Salina Landfill site in the form of paint sludge, waste paint thinner, and oil-saturated spill sorbents containing polychlorinated biphenyls (PCBs) from General Motors (GM). Other industrial waste disposed of at the site includes unknown drummed wastes from Carrier Corporation.

Previous on-site sampling has been conducted by NYSDEC, Onondaga County Health Department (OCHD), and NUS Corporation for the United States Environmental Protection Agency (EPA). Samples were collected in 1986 and 1987 and included surface and subsurface soil, groundwater, surface water, and sediment from Ley Creek and on-site drainageways. Hazardous wastes associated with documented disposal have been detected at the site in the form of PCBs at levels greater than 50 ppm (ATL 1987). In addition,

hazardous constituents potentially associated with documented disposal have been detected in environmental media at the site.

As part of this PSA, E & E conducted file searches and site inspections (E & E 1992). Fieldwork for the PSA investigation was conducted by JCL and E & E in 1993. At this time, 10 surface water samples, 10 sediment samples, five surface soil samples, and three leachate samples were collected for analysis. Chlorinated organics were detected in surface water and sediment samples from Ley Creek adjacent to the site. PCBs were detected in sediment samples from Ley Creek adjacent to the site. PCBs were also detected in sediment samples from drainage ditches receiving runoff from the site, and in surface soil samples collected from the site. In addition, leachate discharging from the site directly to Ley Creek contained volatile and semivolatile organic compounds and PCBs. The nature and extent of contamination is consistent with the use of the area for disposal of documented municipal, industrial, and hazardous wastes.

A significant threat is indicated by the results of the PSA sampling at the site. Discharges from the site exceed ambient surface water standards. Leachate containing PCBs, volatile organic compounds (VOCs), and heavy metals is discharging directly to Ley Creek. Because of the documented hazardous waste disposal at the site, the levels of hazardous constituents in environmental media at the site, and the significant threat caused by the site, it is recommended that the Salina Town Landfill site be reclassified to a Class 2 site.

## **1. SITE ASSESSMENT SUMMARY**

### **1.1 INTRODUCTION**

Under the New York State Department of Environmental Conservation (NYSDEC) Superfund Standby Contract, Joseph C. Lu, P.E., P.C. (JCL), a subcontractor to Ecology and Environment Engineering, P.C. (E & E), conducted a Preliminary Site Assessment (PSA) at the Salina Town Landfill (site number 734036) site in the Town of Salina, Onondaga County, New York. This report summarizes PSA activities to date.

### **1.2 PURPOSE**

The purpose of the PSA is to provide NYSDEC with the information necessary to properly assess and classify the site according to one of the following categories of hazardous waste sites pursuant to Section 27-1305 of the Environmental Conservation Law:

- **Class 1:** Causing or presenting an imminent danger or causing irreversible or irreparable damage to the public health or environment—immediate action required;
- **Class 2:** Significant threat to the public health or environment—action required;
- **Class 3:** Does not present a significant threat to the public health or environment—action may be deferred;
- **Class 4:** Site properly closed—requires continued management; or
- **Class 5:** Site properly closed, no evidence of present or potential adverse impact—no further action required.

If one of the above categories does not apply to the site or if disposal of consequential amounts of hazardous waste was not documented, the site may be deleted from the Registry of Inactive Hazardous Waste Disposal Sites. If data are inadequate and/or insufficient to classify the site, it receives a temporary 2A classification from NYSDEC.

### 1.3 SITE DESCRIPTION

The Salina Town Landfill site is located on New York State Route 11 (Wolf Street) in the Town of Salina, Onondaga County, New York (see Figures 1-1 and 1-2). The site encompasses approximately 50 acres of land and was used as a municipal landfill for the disposal of domestic, commercial, and industrial waste from prior to 1956 until 1974 (C & S 1972; OCHD 1979; E & E 1992).

The site is bordered by Ley Creek and industrial buildings to the south, the New York State Thruway to the north, Wolf Street and commercial buildings to the east, and an Onondaga County transfer station and sewage pumping station (formerly a sewage treatment plant) to the west (C & S 1972; Town of Salina 1975). The landfill is located in an industrial area, and there are waste disposal areas in the vicinity. Ley Creek historically has had pollution problems due to urban storm runoff and industrial effluent discharges to the creek (O'Brien & Gere 1989; NYSDEC 1986). The General Motors (GM) Fisher Guide plant is located approximately 3 miles upstream of the Salina Landfill site, and the Ley Creek dredging spoils site, which contains polychlorinated biphenyls (PCBs), is located approximately 2 miles upstream (NYSDEC 1992). Residential areas are located approximately 500 feet to the northeast, 4,100 feet to the west, and 5,600 feet to the north (BTSA 1987).

The site is situated in a flood-prone area adjacent to Ley Creek, and it was a wetland prior to landfill operations area (NYSDEC undated a). The nearest New York State-regulated wetlands is located approximately 2,000 feet to the north (SYW-8, Class II wetland). In addition, a Class I wetland (SYE-6) and a Class II wetland (SYW-II) are located approximately 1 mile east and southwest, respectively (NYSDEC undated b). The segment of Ley Creek adjacent to the Salina Landfill site is a Class B stream. The best usage for Class B waters are primary and secondary contact recreation and fishing. These waters are to be suitable for fish propagation and survival (NYCRR 1983). A New York State Department of Health (NYSDOH) Health Advisory currently is in effect against the consumption of fish from Onondaga Lake and its tributaries, including Ley Creek (NYSDEC 1993).

Currently, the site is relatively flat, with the exception of two prominent mounded areas. The site has a grassy cover with clusters of tall, reedy wetlands vegetation present in numerous areas on site, including one of the two mounded areas. During this PSA investigation, leachate was observed discharging from the south side of the landfill to the north bank of Ley Creek. The surface elevation of the site is approximately 10 to 20 feet higher than the water level in Ley Creek. Several utility lines (powerlines, pipeline, sewer lines) traverse the landfill, and refuse exists beneath and above these utility installations. An abandoned sanitary sewer line, owned by Onondaga County, exists under the central portion of the landfill and is oriented in an east/west direction (Paratore 1994). A drainage ditch drains surface water from the site and from a portion of the New York State Thruway to the north through a partially covered 48-inch culvert pipe that discharges to Ley Creek. This drainage ditch was constructed as part of final closure operations to restore proper water flow after landfill operations impaired or blocked the site's original drainageways (C&S 1972).

#### **1.4 HAZARDOUS WASTE SITE DISCUSSION**

Six hundred forty tons of paint sludge and 22 tons of waste paint thinner were documented as being disposed of at the Salina Landfill site by GM Fisher Guide Division from 1962 to 1973 (General Motors 1985). PCB-laden wastes in the form of oil-saturated sorbents used in floor cleanups, were disposed of by GM at the Salina Landfill, although the waste was not inventoried or tracked; and therefore, the amount is unknown (Giacobbi; 1986, NYSDOH 1986). Other industrial waste disposed of by GM at Salina Landfill include buffing sludge and fly ash (GM 1992). The fill material used for daily cover and landfill closure operations may have included PCB-contaminated soil since some of the soil was obtained from the Ley Creek dredgings (Kane 1981; OCHD 1970a). Sewage sludge from the Ley Creek sewage treatment plant was used as cover on the landfill for at least a short time, ending in March 1970 (OCHD 1970b).

According to affidavits from waste haulers, drummed wastes from Carrier Corporation's Thompson Road Plant in Syracuse were disposed of at the Salina Landfill from 1974 to 1979 (Hupper 1989). The amount of waste is unknown, and the contents of the drums may have included 2-butanone (methylethylketone), toluene, xylene, and solder flux, among many other substances (Hupper 1989).

Municipal landfilling activities ceased in 1975, but the site was not covered and graded in 1982. Hazardous wastes associated with documented disposal have been documented at the site in the form of PCBs at levels greater than 50 ppm (ATL 1987).

### **1.5 SUMMARY OF PSA WORK**

A PSA Task 1 report for the Salina Landfill site submitted in July 1992 concluded that insufficient information existed to determine whether the site posed a significant threat to human health or the environment. Further investigation was recommended (E & E 1992). Environmental media including surface water, sediment, leachate, and surface soil were sampled. The analyses performed include full Target Compound List (TCL).

During the PSA field investigation, chlorinated organics were detected in surface water and sediment samples from Ley Creek adjacent to the site. PCBs were detected in sediment samples from Ley Creek adjacent to the site. PCBs were also detected in sediment samples from drainage ditches receiving runoff from the site and in a surface soil sample from the site. Leachate from the site discharging directly to Ley Creek contained PCBs, as well as volatile organic compounds (VOCs) and semivolatile organic compounds.

### **1.6 NYSDEC CLASSIFICATION FORMS**

The NYSDEC Registry Site Classification Decision Form, Classification Worksheet and Site Priority Ranking Worksheet are presented on pages 1-5, 1-6 and 1-7. These forms provide information pertinent to the classification of the site in accordance with 6 NYCRR, Part 375.

**New York State Department of Environmental Conservation  
Division of Hazardous Waste Remediation**

**REGISTRY SITE CLASSIFICATION DECISION**

1. Site Name: Salina Town Landfill	2. Site No.: 734036	3. Town/City/Village: Salina	4. County: Onondaga
5. Region: 7		6. Classification      Current: 2a      Proposed: 2      Modify	
7. Location of Site (see Figure 1-1 for site location)			
a. Quadrangle: Syracuse West	b. Site Latitude: 43° 05' 22" N	Longitude: 76° 08' 53" W	c. Tax Map Number* 73
8. Briefly Describe the Site (see Figure 1-2 for site plan)			
<p>The site encompasses approximately 50 acres of land and was used for the disposal of domestic, commercial, and industrial waste from prior to 1956 to 1975. It underwent grading and capping operations in 1982. The site received PCB-laden wastes, as well as paint sludge, buffing sludge, paint thinner and fly ash. The site is bordered on the south by Ley Creek, which has a history of pollution problems due to urban storm run off and industrial effluent discharge.</p>			
<p>a. Area: 50 acres      b. EPA ID Number: NYD981560402</p> <p>c. Completed      <input type="checkbox"/> Phase I      <input type="checkbox"/> Phase II      <input checked="" type="checkbox"/> PSA      <input type="checkbox"/> RI/FS      <input type="checkbox"/> PA/SI      <input type="checkbox"/> Other</p>			
9. Hazardous Wastes Disposed			
<p>From 1962 to 1973, 640 tons of paint sludge (EPA Waste Code D002) and 22 tons of waste paint thinner (EPA Waste Code F003) were disposed of by General Motors Fisher Guide Division. PCB-laden wastes in the form of oil-saturated sorbents for floor cleanups were disposed of by GM at the site, although the waste was not inventoried or tracked, and therefore, the amount is unknown. Other potentially hazardous waste disposed of by GM at the site include buffing sludge and fly ash. Possible PCB-contaminated fill dredged from Ley Creek was used in daily cover operations. Unknown quantities of potentially hazardous drummed waste from Carrier Corporation were allegedly disposed of at the site from 1974 to 1979.</p>			
10. Analytical Data Available			
<p>a. <input type="checkbox"/> Air      <input checked="" type="checkbox"/> Groundwater      <input checked="" type="checkbox"/> Surface Water      <input checked="" type="checkbox"/> Soil      <input type="checkbox"/> Waste      <input type="checkbox"/> EPTox      <input type="checkbox"/> TCLP</p> <p>b. Contravention of Standards or Guidance Values</p>			
<p><u>Surface Water from Ley Creek (Class B standards)</u></p> <p>Aluminum (100 µg/L): 150 - 607 µg/L</p> <p>Iron (300 µg/L): 372 - 1,660 µg/L</p> <p>Zinc (30 µg/L): 37.6 - 77.1 µg/L</p>		<p><u>Surface Water from Drainageways (Class D Standards)</u></p> <p>Copper (123 µg/L*): 139 µg/L</p> <p>Iron (300 µg/L): 421 - 244,000 µg/L</p> <p>Cyanide (22 µg/L): 28 µg/L</p> <p>*Standard based on hardness.</p>	
<p><u>Sediment from Ley Creek</u></p> <p>PCBs 570 to 2,200 µg/kg</p>		<p><u>Leachate (Class D standards)</u></p> <p>PCB (0.001 µg/L): 2.5 and 2.6 µg/L</p> <p>Copper (127 µg/L*): 168 µg/L</p> <p>Iron (300 µg/L): 72,700 and 153,000 µg/L</p> <p>*Standard based on hardness.</p>	
<p><u>Sediment from Drainageways</u></p> <p>PCBs 370 to 7,100 µg/kg</p>		<p>1987 subsurface soil sample SW-2: PCBs 270 ppm</p>	
11. JUSTIFICATION FOR CLASSIFICATION DECISION			
<p>A significant threat is indicated by the results of the PSA sampling at the site. Discharges from the site exceed ambient surface water standards. Leachate containing PCBs, VOCs, and heavy metals is discharging directly to Ley Creek, a protected stream. Currently, a NYSDOH health advisory is in effect against the consumption of fish from Onondaga Lake and its tributaries, including Ley Creek. Because of the documented hazardous waste disposal at the site, the levels of hazardous constituents in environmental media at the site, and the significant threat caused by the site, it is recommended that the Salina Town Landfill site be reclassified to a Class 2 site.</p>			
12. Site Impact Data			
<p>a. Nearest surface water: Distance <u>0</u> ft.</p> <p>b. Nearest groundwater: Depth <u>1</u> ft.</p> <p>c. Nearest water supply: Distance <u>&gt;20,000</u> ft.</p> <p>d. Nearest building: Distance <u>200</u> ft.</p>		<p>Direction <u>south</u></p> <p>Flow Direction <u>south, southwest</u></p> <p>Direction <u>southeast, north</u></p> <p>Direction <u>east</u></p>	
<p>e. In State Economic Development Zone?      <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>f. Crops or livestock on site?      <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>g. Documented fish or wildlife mortality?      <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>h. Impact on special status fish or wildlife resource?      <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>		<p>Classification <u>B - not drinking water source</u></p> <p><input type="checkbox"/> Sole Source      <input type="checkbox"/> Primary      <input type="checkbox"/> Principal</p> <p>Active?      <input type="checkbox"/> Yes      <input type="checkbox"/> No</p> <p>Use <u>Commercial</u></p> <p>i. Controlled site access?      <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>j. Exposed hazardous waste?      <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>k. HRS Score _____</p> <p>l. For Class 2: Priority Category <u>3</u></p>	



**New York State Department of Environmental Conservation  
Division of Hazardous Waste Remediation**

**REGISTRY SITE CLASSIFICATION DECISION**

<b>13. Site Owner's Name</b> see attached	<b>14. Address</b> see attached	<b>15. Telephone Number</b>
<b>16. Preparer</b>  _____ <b>Signature</b> <b>Date</b>  _____ <b>Name, Title, Organization</b>		<b>17. Approved</b>  _____ <b>Signature</b> <b>Date</b>  _____ <b>Name, Title, Organization</b>

SITE OWNERS	
Name	Address
Town of Salina	201 School Road Liverpool, NY 13088
John Paratore	1551 Breimerton Road Syracuse, NY 13208
Niagara Mohawk Power Corp.	Real Estate Tax Department A-3 300 Erie Boulevard Syracuse, NY 13202
County of Onondaga Division of Drainage and Sanitation	650 Hiawatha Boulevard W. Syracuse, NY 13202

## CLASSIFICATION WORKSHEET

Site: Salina Town Landfill County: Onondaga Region: 7

1. Hazardous waste disposed? ☒ Yes (to 2) ☐ No (Stop) ☐ Unknown (Stop)

2. Consequential amount of hazardous waste? ☒ Yes (to 3) ☐ No (Stop) ☐ Unknown (to 3)

3. Part 375-1.4(a)(1) applies? ☐ No (to 4) ☐ Unknown (to 4)

☒ Yes (as checked below; Class 2; to 5)

☐ a. endangered or threatened species

☐ d. fish, shellfish, crustacea, or wildlife

☒ b. streams, wetlands, or coastal zones

☐ e. fire, spill, explosion, or toxic reaction

☒ c. bioaccumulation

☐ f. proximity to people or water supplies

4. Part 375-1.4(a)(2) applies? ☐ No (Class 3; Stop) ☐ Unknown (Class 2a; Stop)

☐ Yes (Class 2; to 5)

5. Factor(s) considered in making this determination: Results of PSA sampling indicate a significant threat

because discharges from the site contravene ambient surface water standards. Leachate containing PCBs, VOCs,

and heavy metals is discharging directly to Ley Creek, a protected stream. Hazardous waste disposal has been documented at the site.

### SUMMARY

Consequential Hazardous Waste

☒ Yes ☐ No ☐ Unknown

Significant Threat

☒ Yes ☐ No ☐ Unknown

Proposed Classification 2

Site Number 734036

Date

Signature and Title

# **NEW YORK STATE DEPARTMENTS OF ENVIRONMENTAL CONSERVATION AND HEALTH INACTIVE HAZARDOUS WASTE DISPOSAL, SITE PRIORITY RANKING WORKSHEET**

**SITE I.D.:** 734036

**SITE NAME:** Salina Town Landfill

**Priority I - Sites for which remediation should supersede all other Class 2 sites. Priority I can be assigned if any one of the following questions can be answered affirmatively.**

- a) Has a public or private water supply which is currently in use been contaminated or threatened? . . . ☐
- b) Has human exposure to contaminants (or the potential for exposure) been identified which represents a significant health risk as determined by DOH? . . . ☐ ☐ (1)
- c) Has bioaccumulation of site contaminants in flora or fauna resulted in a health advisory? . . . ☐ (If 1 or more boxes are checked, check this box)
- d) Are site contaminants present at levels that are acutely toxic to fish or wildlife or that have caused documented fish or wildlife mortality? . . . ☐

**Priority II - Important Sites. Priority II will be assigned if any of the following questions can be answered affirmatively.**

- a) Has a Class A or AA surface water body, primary or principal aquifer been contaminated or threatened without affecting an existing water supply? . . . ☐
- b) Has bioaccumulation of site contaminants in flora or fauna resulted in actionable levels (but not a health advisory)? . . . ☐ ☐ (2)
- c) Are contaminants at levels chronically toxic to fish/wildlife? . . . ☐ (If 1 or more boxes are checked, check this box)
- d) Have endangered, threatened or rare species, significant habitats, designated coastal zone or regulated wetlands been impacted by releases from the site? . . . ☐

**Priority III - will be assigned unless one or more of the site prioritization criteria, specified above, apply to a site. After remedial needs for Priority I and II sites have been accommodated, remediation of sites under this category can be considered. If Priority III, check box 3.**

☒ (3)

Enter the number of the priority box checked 1, 2, or 3 here . . . ☐ (4)  
This is the site's priority rank.

## **FACTORS**

**LJC Factor - If the sites has been identified by the International Joint Commission (LJC) as a component in a remedial action plan, subtract (1) from the value in box 4 and enter the result in box 5 .**

☐ (5)

**KDZ Factor - If the site is within a New York State designated Economic Development Zone (EDZ) should this fact cause the site priority to be raised? . . .**

Yes No  
☐ ☐

**Community Support Factor - If the site has been targeted for local government-supported development by a developer willing to sign a consent order with DEC to finance investigation and remediation should this fact cause the site priority to be raised? . . .**

Yes No  
☐ ☐

If either "yes" box is checked, subtract 1 from the value in box 4 and enter the result into box 6. If "no" is checked, the value in box 6 equals box 4 (or box 5 if applicable). If both LJC and EDZ/Community Support factors apply, only 1 (not 2) will be subtracted from the value in box 4. The resultant value in box 6 will never be less than 1 . . .

☐ (6)

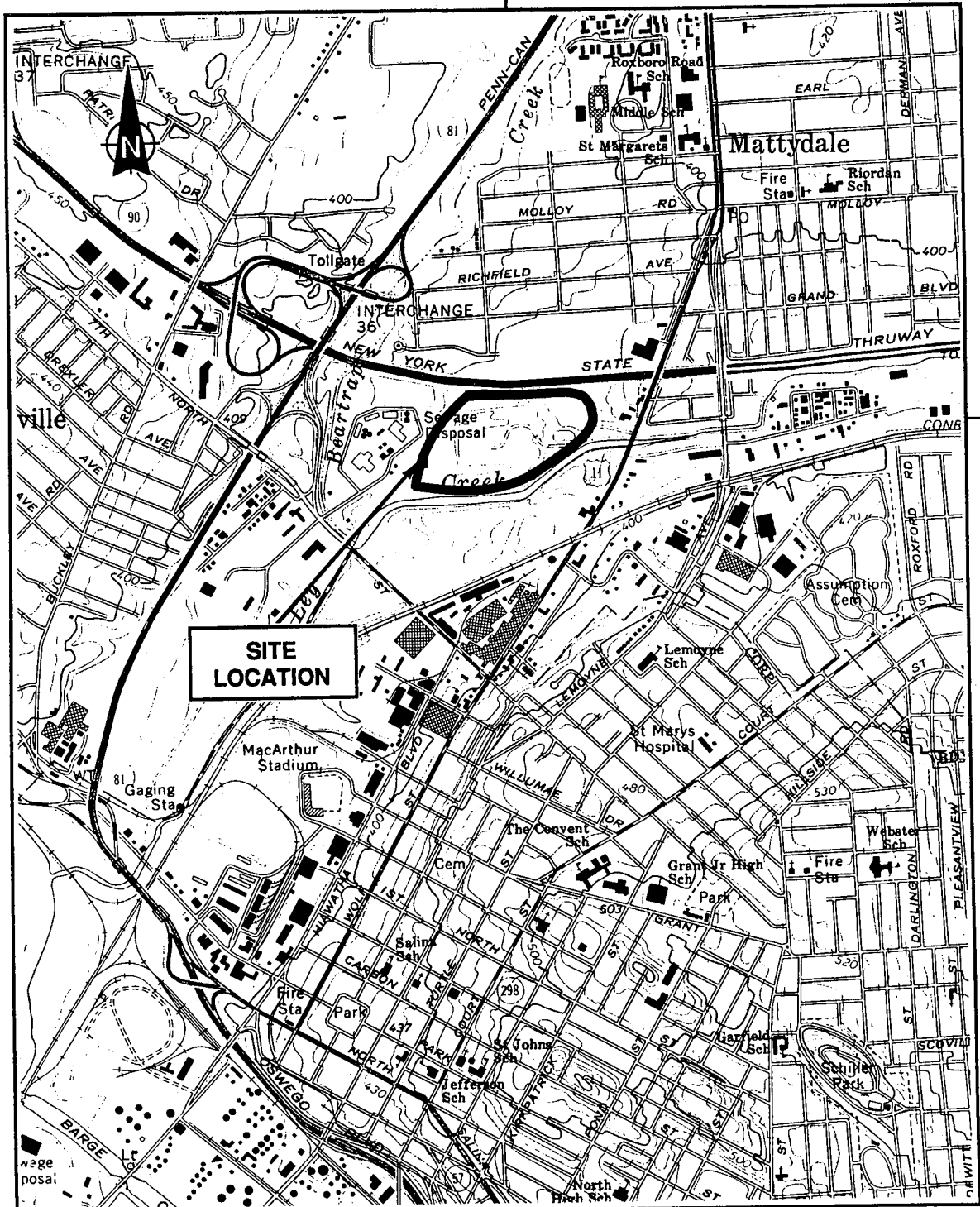
**IRM NOTE: Should this site be considered a candidate for an Interim Remedial Measure (IRM) as defined by 6 NYCRR Part 375-1.3n? . . .**

Yes No  
☐ ☒

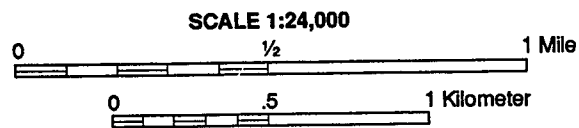
If "yes" please explain why: \_\_\_\_\_

Preparer: \_\_\_\_\_ Date: \_\_\_\_\_

76°08'53"W



SOURCE: USGS 7.5 Minute Series (Topographic) Quadrangle: Syracuse West, NY, 1973, Photorevised 1978.



**Figure 1-1**  
**LOCATION MAP, SALINA TOWN LANDFILL SITE**

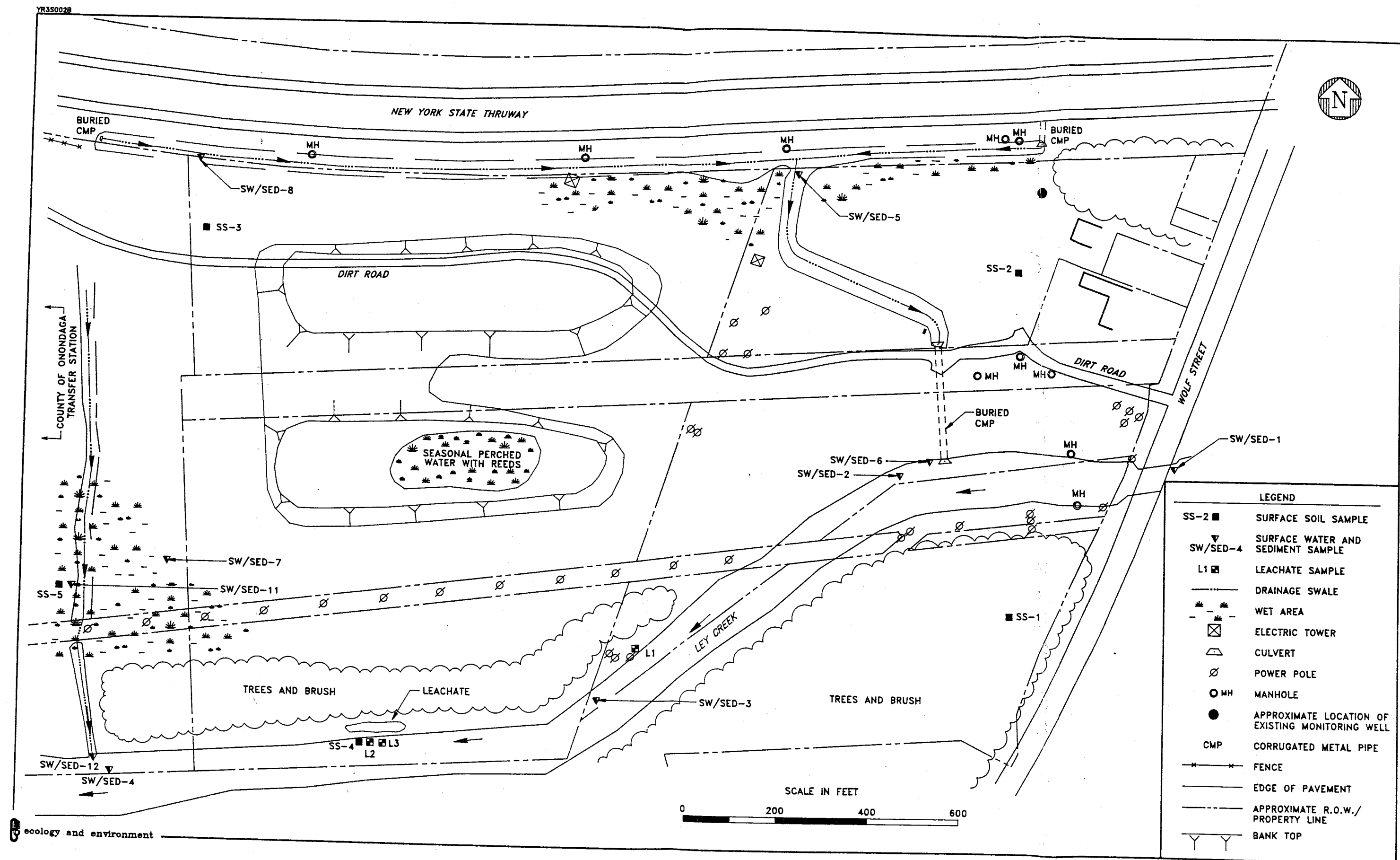


Figure 1-2 SAMPLE LOCATION MAP  
SALINA TOWN LANDFILL SITE

## 2. SITE HISTORY

The Salina Landfill site is a former municipal sanitary landfill that accepted domestic, commercial, and industrial waste from the Town of Salina and its vicinity. During the time of active landfill disposal, the majority of the site was owned by East Plaza, Inc., and leased to the Town of Salina (Ventre 1994). The western portion (approximately 29 acres) of the site was purchased by the Town of Salina in 1981. The eastern portion of the site (approximately 15 acres) was purchased from East Plaza, Inc., by John Paratore in 1985 (Paratore 1993). Two strip ownership parcels for utilities crossing the site are owned by Onondaga County (approximately 5 acres) and Niagara Mohawk (approximately 1.5 acres) (Town of Salina 1975).

Hazardous wastes, in the form of paint sludge and waste paint thinner, were disposed of by GM at the site between 1962 and 1973 (GM 1985). PCB-containing wastes, in the form of oil-saturated sorbents that were used to clean up floors after coolant and hydraulic-oil leaks, were mixed in with the GM plant's general refuse and taken to four Onondaga County landfills, including the Salina Landfill site (Giacobbi 1986; Light 1986). The amount of PCB-contaminated wastes taken from the GM Fisher Guide Division to the Salina Landfill site is unknown, as is the total amount of PCB wastes generated by GM prior to landfill closure in 1974 (OCHD 1979). In addition, affidavits from waste haulers alleged that drummed wastes from Carrier Corporation's Thompson Road Plant in Syracuse were disposed of at the Salina Landfill from 1974 to 1979 (Hupper 1989). The amount of waste is unknown, and the contents of the drums may have included 2-butanone (methylethylketone), toluene, xylene, and solder flux, among many other substances (Hupper 1989).

There were numerous violations of New York State sanitary landfill regulations during operation and early stages of closure, including incidents of burning, leachate

outbreaks, protruding refuse, standing water, and inadequate cover (NYSDEC 1972; NYSDEC 1987; OCHD 1986). The fill material used for daily cover and landfill closure operations may have included PCB-contaminated soil, since some of the soil was obtained from the Ley Creek dredgings (Kane 1981; OCHD 1970a). Sewage sludge from the Ley Creek sewage treatment plant was used as cover on the landfill for at least a short time, ending in March 1970 (OCHD 1970b).

The landfill stopped accepting municipal refuse by early 1975 (Light 1986; Kane 1985), but problems related to contractor enlistment, owner disputes, weather conditions, and other logistics delayed the completion of final grading, capping, and cover until November 1982 (Kane 1985; Wheeler 1981).

On-site sampling has been conducted by NYSDEC, Onondaga County Health Department (OCHD), and NUS Corporation for the United States Environmental Protection Agency (EPA). Samples were collected in 1986 and 1987 and included surface soil, subsurface soil, groundwater, surface water, and sediment from Ley Creek and on-site drainage ways (NUS 1986; ATL 1987; C & S 1987; OBG 1986; O'Brien and Gere 1989). PCBs were found at concentrations up to 270 ppm in oil-saturated subsurface soils collected from well borings; however, PCBs were not detected in on-site surface soils (ATL 1987). Sediment samples collected from Ley Creek contained PCBs at concentrations up to 3.6 ppm; however, PCB contamination has been identified upstream of the Salina Landfill site as well (Grant 1987; NUS 1986). Results of surface water sampling in Ley Creek upstream and downstream of the site showed no significant difference in contamination between the two locations. Groundwater sampling was performed at a single upgradient monitoring well. Analytical results indicated the presence of trace levels of volatiles and semivolatiles (ATL 1987; NYCRR 1986). No cyanide, pesticides, or PCBs were detected. Downgradient wells could not be completed because the two borings intended for well installation encountered wastes in the form of black oil and petroleum saturated soil (ATL 1987). Samples from these borings contained PCBs as previously stated.

The sanitary sewer that exists under the center of the landfill (Ley Creek Trunk Sewer) is owned by Onondaga County and was abandoned in place the early 1990s. The sewer has been replaced by a sewer that runs along the east side of the landfill, northward to of the New York State Thruway. When the sewer was abandoned, the manholes were filled



with crushed stone and their covers removed. The sewer was blocked with bulkheads on both the eastern and western ends of the site (Pickholtz 1994).

### **3. PSA TASK DISCUSSION**

Task 1 of the PSA was performed in 1991 and 1992 by E & E under contract to NYSDEC and included a file search and site inspection. The PSA was continued by JCL, a subcontractor to E & E, at the Salina Landfill site with fieldwork performed in July and November 1993. The scope of work for the PSA was prepared by NYSDEC and included a phased approach for this site. Based on the analytical results of the environmental media that was sampled during the initial phases of the PSA, NYSDEC concluded that additional phases of investigation (i.e., monitoring well installation and sampling) would not provide significant additional information needed to reclassify the site. The EPA Site Inspection Form 2070-13 is presented in Appendix A.

With minor exceptions, all field tasks were performed in accordance with the scope of work. Two surface water/sediment samples (SW/SED-9 and SW/SED-10) proposed in the abbreviated technical work plan could not be collected. These samples were to have been obtained from manholes on each end of the abandoned sanitary sewer. However, at the time of sampling in November 1993, it was discovered that these manholes had been filled.

#### **3.1 PSA TASK 1 REPORT**

The Task 1 file search and review was conducted utilizing state, county, municipal, and site-specific sources. This information was compiled from existing data as well as new sources, and a preliminary characterization of the site was developed after review.

A site inspection was conducted on May 1, 1991 to assess the surface characteristics of the site and vicinity, observe evidence (if any) of hazardous substances or wastes present, photograph the site, conduct preliminary air monitoring using a photoionization detector (PID) and a radiation meter and confirm information from the original data search. At the time of

the site inspection, there was no physical evidence of hazardous waste disposal, although exposed trash and leachate seeps were observed. No readings above background levels were noted on any instruments during the inspection.

The PSA Task 1 report was submitted to NYSDEC in July, 1992. This report concluded that additional data was needed to assess the threat to public health and the environment posed by the site. Additional investigations were recommended to determine if the wastes at this site are hazardous and widespread.

### **3.2 PRE-FIELD INVESTIGATION**

Continuation of the PSA for the Salina Landfill site involved several field tasks as described in the following sections. Prior to initiating field activities, E & E performed several other tasks. In June 1993, E & E submitted the Project Management Work Plan to NYSDEC for approval. This document included the abbreviated technical work plans prepared by NYSDEC for the site as well as technical approach for the management and performance of the field tasks, laboratory analyses, and report preparation.

In June 1993, E & E submitted the General Health and Safety Plan (HASP) and Quality Assurance Project Plan (QAPjP) to NYSDEC for review. The HASP outlined the health and safety procedures and protocols to be followed during site characterization sampling and field activities. This document and information gathered during Task 1 of the PSA were used to generate a site-specific safety plan.

In August 1993, E & E submitted the final QAPjP to NYSDEC for approval. The QAPjP presents the policies, organization, objectives, functional activities, and specific quality assurance (QA) and quality control (QC) activities implemented for this project. The QAPjP was designed in accordance with NYSDEC and previously defined EPA guidance documents to ensure that all technical data generated by E & E's Analytical Services Center (ASC) meet specific data quality objectives.

In addition to preparation of these documents, tax map information was obtained and a site reconnaissance was performed. The site reconnaissance was conducted by E & E and JCL in conjunction with site sampling on July 7, 1993. No physical evidence of hazardous waste disposal was observed at this time.

### 3.3 SAMPLING ACTIVITIES

On July 7 and November 30, 1993, a total of 10 surface water samples, 10 sediment samples, five surface soil samples, and three leachate samples were collected (see Figure 1-2). Sample locations were chosen with the concurrence of NYSDEC field representatives and based on information provided in NYSDEC's abbreviated work plan for the site.

All sample collection, shipping, handling, and analytical procedures were performed in accordance with the QAPjP (E & E 1993a). Additionally, field and sampling procedures were performed in accordance with the work plan (E & E 1993b), QAPjP, and HASP (E & E 1993c). Sample analysis was performed by E & E's ASC in accordance with NYSDEC's 1991 Analytical Services Protocol. All samples except SW/SED-11, SW/SED-12, SS-4 and L-3 were analyzed for full TCL parameters including volatiles, semivolatiles, pesticides, PCBs, and inorganics. The remaining samples were analyzed for volatiles, PCBs, and pesticides only. One surface water matrix spike/matrix spike duplicate (MS/MSD) sample set and one sediment MS/MSD sample set were collected for QA/QC purposes.

Table 3-1 is a summary of the sampling and analyses performed during this investigation. Tables 3-2 through 3-11 present results of sampling and analysis by media. Data summary forms are presented in Appendix B. Tentatively identified compounds (TICs) detected in samples collected during this investigation are also presented in Appendix B.

#### 3.3.1 Surface Water

Surface water samples SW-1 through SW-4 were collected from Ley Creek adjacent to the site. Sample SW-1 was collected upstream of the site and was used for comparison with samples collected downstream. However, due to Ley Creek's historic water quality problems, analytical results from SW-1 may not represent uncontaminated water quality conditions in the area.

Sample SW-8 was collected north of the northwest corner of the site in the drainage ditch that separates the site from the New York State Thruway. This ditch receives runoff from the northern portion of the site and from the thruway. Flow in this ditch converges in the north central part of the site and flows south, eventually discharging to Ley Creek.

Sample SW-5 was collected from the confluence of the thruway ditch and the generally north-south trending drainage ditches that bisect the site. From this sampling

location, surface water flows south and eventually enters a 48-inch culvert pipe. Sample SW-6 was collected at the outfall of this pipe to Ley Creek.

Samples SW-11 and SW-12 were collected from an unnamed tributary of Ley Creek located to the west of the site. The SW-4 location is upstream of the area where this tributary enters the creek.

#### **3.3.1.1 Surface Water from Ley Creek**

Four surface water samples (SW-1 through SW-4) from Ley Creek and one (SW-6) from an outfall to the Creek were collected during this PSA (see Figure 1-2) and were analyzed for full TCL parameters. Ley Creek is a Class B stream in the area adjacent to the site; therefore, analytical results for these samples were compared to NYSDEC Class B surface water standards.

Low levels of VOCs were detected in surface water samples from Ley Creek and included vinyl chloride (VC), total 1,2-dichloroethene (1,2 DCE), 1,2-dichloroethane (1,2-DCA), and toluene (see Table 3-2). Total 1,2-DCE was detected above quantitation limits in surface water from Ley Creek in SW-2 at 15  $\mu\text{g/L}$  and in SW-6 at 31  $\mu\text{g/L}$ . Total 1,2-DCE was not detected in the upstream sample (SW-1). NYSDEC Class B standards are not available for any VOCs detected in surface water samples from Ley Creek. 1,2-DCA was detected in all samples, including the upstream sample.

One semivolatile organic compound, 1,4-dichlorobenzene (1,4-DCB) was detected above quantitation limits in sample SW-3 (see Table 3-2). The detected concentration is below the Class B standard of 5  $\mu\text{g/L}$ .

No pesticides or PCBs were detected in surface water samples from Ley Creek.

A total of 12 inorganic analytes were detected in surface water samples from Ley Creek (see Table 3-3). The Class B surface water standards for aluminum and zinc were exceeded in samples SW-1, SW-2, SW-3, and SW-4. The Class B standard for iron was exceeded in all samples from Ley Creek. Concentrations of inorganics in samples adjacent to or downgradient of the site were compared with concentrations in the upstream sample to assess the impact of the site on water quality. In sample SW-4, aluminum, copper, iron, lead, and manganese were detected at concentrations at least two times higher than in the upstream sample, SW-1 (see Table 3-3). In addition, arsenic was detected in SW-6 at a concentration greater than two times that of the upstream sample.

### **3.3.1.2 Surface Water from Drainageways**

Surface water samples SW-5, SW-7, SW-8, SW-11, and SW-12 were collected from drainage ditches on or adjacent to the site (see Figure 1-2). Samples SW-5, SW-7, and SW-8 were analyzed for full TCL parameters. Samples SW-11 and SW-12 were analyzed for volatiles, PCBs, and pesticides only. Analytical results for these samples were compared to NYSDEC Class D surface water standards (see Tables 3-4 and 3-5). The best usage of Class D waters is fishing; Class D waters are suitable for fish survival and primary and secondary contact recreation, although other factors may limit use for these purposes. While water in these drainage ditches does not strictly meet the criteria of Class D waters, these standards are used as a conservative basis of comparison.

VOCs detected in surface water samples from drainages include acetone, carbon disulfide, total 1,2-DCE, 1,2-DCA, and 1,1,1-trichloroethane (1,1,1-TCA). The only VOC found above quantitation limits was acetone, which was detected at 160  $\mu\text{g/L}$  in sample SW-11. No Class D standards are available for any of the VOCs detected in surface water from drainage ditches. Semivolatile organics, pesticides, and PCBs were not detected in surface water samples from drainage ditches.

Eighteen inorganic analytes were detected in surface water samples collected from the drainage ditch (see Table 3-5). The Class D standards for copper and cyanide were exceeded in sample SW-7, and the standard for iron was exceeded in samples SW-5, SW-7, and SW-8.

### **3.3.2 Sediment**

Ten sediment samples were collected at the same locations as surface water samples (see Figure 1-2). Sediment samples SED-1 through SED-4 were collected from Ley Creek. SED-6 was collected from a culvert at its outfall to Ley Creek. SED-1 was collected upstream of the site. Sediment samples SED-5, SED-7, SED-8, SED-11, and SED-12 were collected from drainage ditches on or adjacent to the site (see Figure 1-2).

VOCs detected in sediment samples from Ley Creek included toluene, total 1,2-DCE, and chlorobenzene (see Table 3-6). Toluene was detected below quantitation limits in samples SED-3 and SED-6. SED-3 also contained chlorobenzene at 32  $\mu\text{g/kg}$ . Total 1,2-DCE was detected below quantitation limits in SED-2. Acetone was detected samples SED-5, SED-8, SED-11, and SED-12, collected from drainages, at concentrations of 170  $\mu\text{g/kg}$ , 84  $\mu\text{g/kg}$ , 120  $\mu\text{g/kg}$ , and 89  $\mu\text{g/kg}$ , respectively.

Semivolatiles detected in sediment samples include polyaromatic hydrocarbons (PAHs) and two related compounds, carbazole and dibenzofuran. In addition, pentachlorophenol was detected in the upstream sample only (see Table 3-6). PAHs were detected in all sediment samples at estimated concentrations ranging from 7,300 to 30,000  $\mu\text{g/kg}$  in samples collected from Ley Creek, and from 530 to 3,000  $\mu\text{g/kg}$  in samples collected from drainage ditches. Carbazole was detected in samples from Ley Creek at estimated concentrations ranging from 79 to 420  $\mu\text{g/kg}$ . Dibenzofuran was detected in SED-2 at an estimated concentration of 200  $\mu\text{g/kg}$ .

Pesticides 4,4'-DDD and 4,4'-DDT were detected in sample SED-12 at estimated concentrations of 26 and 40  $\mu\text{g/kg}$ , respectively. PCBs were detected in all samples collected from Ley Creek and in samples SED-7, SED-11, and SED-12 from drainages (see Table 3-6). Aroclor 1242 was detected in samples SED-2 through SED-4 at concentrations ranging from 1,200 to 2,000  $\mu\text{g/kg}$ . The highest concentration of Aroclor 1242 detected, 2,200  $\mu\text{g/kg}$ , was in the upstream sample SED-1. Aroclor 1242 was detected in sample SED-7 at 370  $\mu\text{g/kg}$ ; Aroclor 1248 was detected at 570  $\mu\text{g/kg}$  in SED-6, collected from Ley Creek, and at 770  $\mu\text{g/kg}$  and 7,100  $\mu\text{g/kg}$  from drainage samples SED-11 and SED-12, respectively. Aroclor-1254 was detected in sample SED-11 at an estimated concentration of 570  $\mu\text{g/kg}$  and in SED-12 at 3,100  $\mu\text{g/kg}$ .

A total of 20 inorganic analytes was detected in sediment samples from Ley Creek, and a total of 20 inorganic analytes were detected in samples from drainage ditches (see Table 3-7). Results were compared to the background concentrations detected in eastern United States soils and other surficial materials (Shacklette and Boerngen 1984). In samples from Ley Creek, calcium, copper, lead, magnesium, and zinc concentrations exceed the upper limits of the 90th percentile in all samples. Concentrations of vanadium in SED-6 and nickel in SED-3 also exceeded the 90th percentile.

Concentrations of inorganic analytes in downstream sediment samples from Ley Creek were compared with the upstream sample SED-1 to assess potential impacts of the site to the stream. Analytes detected at greater than or equal to two times the upstream concentrations include aluminum, arsenic, barium, chromium, nickel, potassium, and vanadium (see Table 3-7). Analytes detected only in downstream samples include beryllium, cadmium, selenium, and thallium.

Concentrations of calcium and lead in all sediment samples from drainage ditches exceed the upper limits of the 90th percentile. The concentrations of antimony and magnesium in SED-5, cadmium in SED-7, and arsenic in SED-8 were above the observed ranges in eastern United States soils and other surficial materials. Concentrations of arsenic and nickel in SED-5, and nickel and copper in SED-7 exceeded the upper limits of the 90th percentile.

### 3.3.3 Surface Soil

One background (off-site) surface soil sample, SS-1, and four on-site surface soils samples, SS-2 through SS-5, were collected as part of the PSA (see Figure 1-2). Surface soil samples were analyzed for full TCL parameters with the exception of SS-4, which was analyzed for volatiles, pesticides and PCBs only. Surface soil sample SS-1, the background sample, was collected off site on the south side of Ley Creek approximately 150 feet west of Wolf Street in a small wooded area surrounded by urban/commercial properties. Sample SS-2 was collected in the northeast portion of the site along the new Onondaga County sewer line. The soil used in the installation of this sewer line reportedly consisted of fill materials. Sample SS-3 was collected in the northwest corner of the site at the bottom of the landfill slope. Sample SS-4 was collected immediately adjacent to the location of leachate sample L-3, (see Section 3.3.4), to provide additional information in this area.

Acetone, the only VOC detected in surface soils, was found at an estimated concentration of 12  $\mu\text{g}/\text{kg}$  in sample SS-4 (see Table 3-8). Semivolatiles detected in surface soil samples include PAHs, and two related compounds, carbazole and dibenzofuran. Concentrations of these compounds were highest in the background sample.

Pesticides were detected at low levels in surface soils and include 4,4'-DDE in SS-3, and dieldrin and 4,4'-DDT in SS-5. PCBs were detected in samples SS-1, SS-2, SS-3, and SS-4. Aroclor 1248 was detected at 59  $\mu\text{g}/\text{kg}$  in SS-2, and at estimated concentrations of 30,000  $\mu\text{g}/\text{kg}$  in SS-1, 36  $\mu\text{g}/\text{kg}$  in SS-3, and at 680  $\mu\text{g}/\text{kg}$  in SS-4. Aroclor 1254 was found at an estimated concentrations of 23  $\mu\text{g}/\text{kg}$  in SS-2, 16  $\mu\text{g}/\text{kg}$  in SS-3, and 280  $\mu\text{g}/\text{kg}$  in SS-4.

A total of 23 inorganic analytes were detected in surface soil samples (see Table 3-9). Concentrations of calcium and magnesium in all on-site surface soil samples exceeded the upper limits of the 90th percentile. The concentrations of calcium in sample SS-5 and magnesium in SS-2 and SS-5 were greater than two times the concentration in the background sample.



### 3.3.4 Leachate

Leachate samples L-1 and L-2 were collected from leachate seeps along the northern bank Ley Creek and analyzed for full TCL parameters. Sample L-3 was collected near L-2 during the second sampling event to try to confirm earlier sampling results (see Figure 1-2). This sample was analyzed for volatiles, pesticides, and PCBs only. Leachate sample analytical results were compared to NYSDEC Class D surface water standards as a conservative basis for comparison since the leachate discharges directly into a Class B stream and is rapidly diluted.

VOCs detected in leachate samples include 1,2-DCA in L-1, and benzene and chlorobenzene in all leachate samples (see Table 3-10). No NYSDEC Class D standards are available for 1,2-DCA and benzene. Concentrations of chlorobenzene in leachate samples are below the Class D standard.

Semivolatiles detected in leachate samples L-1 and L-2 include low levels of 1,2-dichlorobenzene (1,2-DCB), and 1,4-DCB.

One PCB, Aroclor 1232, was detected in samples L-2 and L-3 at estimated concentrations of 2.6 and 2.5  $\mu\text{g/L}$ , respectively. These levels are above the Class D standard of 0.001  $\mu\text{g/L}$ .

A total of 17 inorganic analytes were detected in leachate samples (see Table 3-11). The concentrations of copper in L-1 and iron in L-1 and L-2 exceed Class D surface water standards.

## 3.4 SURVEYING

Following completion of the sampling activities, the site was surveyed under the direction of a licensed surveyor to a vertical accuracy of 0.05 feet and a horizontal precision of 1/10,000. The vertical datum used was taken off a level run on New York State Department of Transportation benchmarks. The horizontal datum was referenced to the New York State Plane Coordinate System, Central Zone. The physical features of the site, Ley Creek, and all PSA sampling locations were surveyed and are shown on Figure 1-2 in this report. No property lines were surveyed. Instead, Town of Salina tax maps (Town of Salina 1975) were used to approximate the property boundaries shown in Figure 3-1.

Table 3-1					
SAMPLING AND ANALYSIS SUMMARY SALINA TOWN LANDFILL SITE					
Sample Number	Target Compound List				
	Volatiles	Semivolatiles	Pesticides/PCBs	Inorganics	Cyanide
<b>Surface Water</b>					
SW-1	X	X	X	X	X
SW-2	X	X	X	X	X
SW-3	X	X	X	X	X
SW-4	X	X	X	X	X
SW-5	X	X	X	X	X
SW-6	X	X	X	X	X
SW-7	X	X	X	X	X
SW-8	X	X	X	X	X
SW-11	X	—	X	—	—
SW-12	X	—	X	—	—
<b>Sediment</b>					
SED-1	X	X	X	X	X
SED-2	X	X	X	X	X
SED-3	X	X	X	X	X
SED-4	X	X	X	X	X
SED-5	X	X	X	X	X
SED-6	X	X	X	X	X
SED-7	X	X	X	X	X
SED-8	X	X	X	X	X
SED-11	X	—	X	—	—
SED-12	X	—	X	—	—
<b>Surface Soil</b>					
SS-1	X	X	X	X	X
SS-2	X	X	X	X	X
SS-3	X	X	X	X	X

<b>Table 3-1</b> <b>SAMPLING AND ANALYSIS SUMMARY</b> <b>SALINA TOWN LANDFILL SITE</b>					
Sample Number	Target Compound List				
	Volatiles	Semivolatiles	Pesticides/PCBs	Inorganics	Cyanide
SS-4	X	—	X	—	—
SS-5	X	X	X	X	X
<b>Leachate</b>					
L-1	X	X	X	X	X
L-2	X	X	X	X	X
L-3	X	—	X	—	—

<p align="center"><b>Table 3-2</b></p> <p align="center"><b>ORGANIC COMPOUNDS DETECTED IN SURFACE</b></p> <p align="center"><b>WATER SAMPLES FROM LEY CREEK</b></p> <p align="center"><b>SALINA TOWN LANDFILL SITE</b></p> <p align="center"><b>(all values reported in <math>\mu\text{g/L}</math>)</b></p>						
Compound	SW-1	SW-2	SW-3	SW-4	SW-6	NYSDEC Class B Surface Water Standard <sup>a</sup>
<b>Volatiles</b>						
Vinyl chloride	—	9 J	—	—	—	NA
Total 1,2-Dichloroethene	—	15	5 J	5 J	31	NA
1,2-Dichloroethane	5 J	5 J	8 J	9 J	9 J	NA
Toluene	—	2 J	—	—	7 J	NA
<b>Semivolatiles</b>						
1,4-Dichlorobenzene	—	—	2 J	—	—	5

Note: Samples were collected on July 7, 1993.

<sup>a</sup> NYSDEC 1993.

Key:

— = Not detected.

J = Estimated concentration.

NA = Not available.

<p align="center"><b>Table 3-3</b></p> <p align="center"><b>INORGANIC ANALYTES DETECTED IN SURFACE WATER SAMPLES FROM</b></p> <p align="center"><b>LEY CREEK</b></p> <p align="center"><b>SALINA TOWN LANDFILL SITE</b></p> <p align="center">(all values reported in <math>\mu\text{g/L}</math> except as noted)</p>						
Analyte	SW-1	SW-2	SW-3	SW-4	SW-6	NYSDEC Class B Water Standard <sup>a</sup>
Aluminum	157	150	179	607 <sup>b</sup>	95.3	100
Arsenic	1.6	3.1	2.9	2.7	4.5 <sup>b</sup>	190
Barium	83.2	87.7	86.3	82.3	105	NA
Calcium	183,000	166,000	182,000	178,000	125,000	NA
Copper	2.4	2.1	3.2	8.2 <sup>b</sup>	—	53 <sup>c</sup>
Iron	372	456	479	1,660 <sup>b</sup>	362	300
Lead	3.0	2.4	4.7	9.5 <sup>b</sup>	—	29 <sup>c</sup>
Magnesium	30,400	33,500	31,900	31,700	43,600	NA
Manganese	71.4	92.9	101	182 <sup>b</sup>	44.1	NA
Potassium	5,680	3,630	4,510	5,050	2,790	NA
Sodium	111,000	105,000	111,000	110,000	105,000	NA
Zinc	53.6	46.5	37.6	77.1	16.0	30
Total Hardness (in mg/L)	583	552	586	575	492	NA

Note: Shaded values exceed the Class B standard.  
 Samples were collected on July 7, 1993.

<sup>a</sup> NYSDEC 1993.

<sup>b</sup> Concentration is greater than two times the concentration in the upstream sample, SW-1.

<sup>c</sup> Standard based on hardness. Hardness value used is average of samples in which analyte is detected.

Key:

— = Not detected.

NA = Not available.

<p align="center"><b>Table 3-4</b></p> <p align="center"><b>ORGANIC COMPOUNDS DETECTED IN</b></p> <p align="center"><b>SURFACE WATER SAMPLES FROM DRAINAGEWAYS</b></p> <p align="center"><b>SALINA TOWN LANDFILL SITE</b></p> <p align="center">(all values reported in <math>\mu\text{g/L}</math>)</p>						
Compound	SW-5	SW-7	SW-8	SW-11	SW-12	NYSDEC Class D Surface Water Standard <sup>a</sup>
<b>Volatiles</b>						
Acetone	—	—	—	160	—	NA
Carbon disulfide	—	—	—	5 J	—	NA
Total 1,2-Dichloroethene	—	—	—	—	3 J	NA
1,2-Dichloroethane	7 J	—	—	—	—	NA
1,1,1-Trichloroethane	—	—	—	—	5 J	NA

Note: Samples SW-11 and SW-12 were not analyzed for semivolatile organic compounds.  
 Samples were collected on July 7 and November 30, 1993.

<sup>a</sup> NYSDEC 1993.

Key:

— = Not detected.

J = Estimated concentration.

NA = Not available.



Table 3-5

**INORGANIC ANALYTES DETECTED IN SURFACE  
WATER SAMPLES FROM DRAINAGEWAYS  
SALINA TOWN LANDFILL SITE**  
(all values reported in  $\mu\text{g/L}$  except as noted)

Analyte	SW-5	SW-7	SW-8	NYSDEC Class D Surface Water Standard <sup>a</sup>
Aluminum	539	2,580	205	NA
Arsenic	5.8	17.6	20.8	360 <sup>b</sup>
Barium	101	3,420	99.5	NA
Cadmium	—	13.0	—	NA
Calcium	124,000	204,000	130,000	NA
Chromium	6.3	95.6	6.1	6,350/9,339/6,488 <sup>c</sup>
Cobalt	—	55.2	—	NA
Copper	—	139	2.8	—/123/81 <sup>c</sup>
Iron	421	244,000	2,500	300
Lead	—	87.3	1.7	—/1,113/634 <sup>c</sup>
Magnesium	43,100	66,000	42,800	NA
Manganese	77.2	738	71.4	NA
Nickel	—	96.4	—	—/8,787/— <sup>c</sup>
Potassium	2,760	87,600	2,500	NA
Sodium	100,000	235,000	70,400	NA
Vanadium	—	25.5	—	190
Zinc	30.9	275	104	1,767
Cyanide	—	28.0	—	22 <sup>d</sup>
Total Hardness (in mg/L)	487	780	500	NA

Note: Shaded values exceed the Class D standard.

Samples SW-11 and SW-12 were not analyzed for inorganics.

Samples were collected on July 7 and November 30, 1993.

<sup>a</sup> NYSDEC 1993.

<sup>b</sup> Standard is acid-soluble form.

<sup>c</sup> Standard is a function of hardness as respectively shown.

<sup>d</sup> Standard is as free cyanide (HCN + CN<sup>-</sup>) expressed as CN.

Table 3-6

**ORGANIC COMPOUNDS DETECTED IN SEDIMENT SAMPLES  
SALINA TOWN LANDFILL SITE  
(all values reported in  $\mu\text{g/kg}$ )**

Compound	Ley Creek					Drainageways				
	SED-1 <sup>a</sup>	SED-2 <sup>b,c</sup>	SED-3 <sup>c</sup>	SED-4 <sup>c</sup>	SED-6 <sup>d</sup>	SED-5	SED-7	SED-8	SED-11	SED-12 <sup>d</sup>
<b>Volatiles</b>										
Acetone	—	—	—	—	—	170	—	84	120	89
Total 1,2-Dichloroethene	—	5 J	—	—	—	—	—	—	—	5 J
Toluene	—	—	3 J	—	1 J	—	—	—	—	—
Chlorobenzene	—	—	32	—	—	—	—	—	—	—
<b>Semivolatiles</b>										
Pentachlorophenol	110 J	—	—	—	—	—	—	—	NA	NA
Carbazole	79 J	420 J	130 J	180 J	110 J	—	—	—	NA	NA
Dibenzofuran	—	200 J	—	—	—	—	—	—	NA	NA
Total PAHs	7,300 J	30,000 J	12,000 J	18,000 J	8,600 J	530 J	3,000 J	1,700 J	NA	NA
<b>Pesticides</b>										
4,4'-DDD	—	—	—	—	—	—	—	—	—	26 J
4,4'-DDT	—	—	—	—	—	—	—	—	—	40 J
<b>PCBs</b>										
Aroclor-1242	2,200 J	1,200	1,200	2,000	—	—	370	—	—	—
Aroclor-1248	—	—	—	—	570	—	—	—	770	7,100
Aroclor-1254	—	—	—	—	—	—	—	—	570 J	3,100



**Table 3-6 (Cont.)**

**Note:** Diethylphthalate, detected 100J in SED-2, was attributed to lab/field contamination although not detected in associated blanks. Samples SED-1, SED-2, SED-3 and SED-4 were collected from Ley Creek. Sample SED-6 was collected from the outfall of a culvert discharging to Ley Creek. Samples SED-5, SED-7, SED-8, SED-11, and SED-12 were collected from drainages on or adjacent to the site. Samples were collected on July 7 and November 30, 1993.

- a Analyzed for pesticides/PCBs at a dilution factor of 10.
- b Analyzed for semivolatiles at a dilution factor of 2.
- c Analyzed for pesticides/PCBs at a dilution factor of 5.
- d Analyzed for pesticides/PCBs at a dilution factor of 2.

**Key:**

- = Not detected.
- J = Estimated concentration.
- NA = Not analyzed.

Table 3-7

**INORGANIC ANALYTES DETECTED IN SEDIMENT SAMPLES**  
**SALINA TOWN LANDFILL**  
 (all values reported in mg/kg)

Analyte	Ley Creek					Drainageways			Background Concentrations in Eastern U.S. Soils and Other Surficial Materials <sup>a</sup>	
	SED-1	SED-2	SED-3	SED-4	SED-6	SED-5	SED-7	SED-8	Upper Limit of the 90th Percentile	Observed Range
Aluminum	2,790	4,120	6,710 <sup>b</sup>	6,060 <sup>b</sup>	6,050 <sup>a</sup>	10,300	6,160	1,080	128,000	> 7,000 - 100,000
Antimony	—	—	—	—	—	91.5	—	—	1.58	< 1 - 8.8
Arsenic	2.9	5.4	5.2	6.5 <sup>b</sup>	8.9 <sup>b</sup>	40.9	4.0	117	16.0	0.1 - 73
Barium	40.2	54.5	93.4 <sup>b</sup>	78.9	75.8	198	347	237	867	10 - 1,500
Beryllium	—	—	0.42	—	—	—	—	—	1.81	< 1 - 7
Cadmium	—	—	2.2	1.7	—	—	7.4	—	NA	0.01 - 7.0 <sup>b</sup>
Calcium	103,000	48,900	59,800	59,700	52,700	69,000	56,200	86,500	14,400	100 - 280,000
Chromium	28.3	29.0	44.3	56.6 <sup>b</sup>	34.0	28.1	109	—	112	1 - 1,000
Cobalt	4.5	6.2	6.5	6.0	5.9	14.6	17.9	7.9	19.8	< 0.3 - 70
Copper	70.7	56.2	76.6	82.1	54.3	47.6	146	16.9	48.7	< 1 - 700
Iron	12,100	11,500	13,000	14,900	15,800	34,200	54,500	24,400	54,100	100 - > 100,000
Lead	83.5	72.1	84.2	81.3	98.0	61.8	151	35.6	33.0	< 10 - 300
Magnesium	12,500	12,400	15,700	15,200	15,700	20,800	2,080	5,360	10,700	50 - 50,000
Manganese	223	222	247	274	356	476	363	129	1,450	< 2 - 7,000

Key at end of table.

Table 3-7

**INORGANIC ANALYTES DETECTED IN SEDIMENT SAMPLES  
SALINA TOWN LANDFILL  
(all values reported in mg/kg)**

Analyte	Ley Creek					Drainageways			Background Concentrations in Eastern U.S. Soils and Other Surficial Materials <sup>a</sup>	
	SED-1	SED-2	SED-3	SED-4	SED-6	SED-5	SED-7	SED-8	Upper Limit of the 90th Percentile	Observed Range
Nickel	16.0	19.5	40.0 <sup>b</sup>	27.0	21.6	40.9	51.8	11.8	38.2	<5 - 700
Potassium	429	813	1,780 <sup>b</sup>	1,350 <sup>b</sup>	1,580 <sup>b</sup>	3,070	1,400	—	23,500	50 - 37,000
Selenium	—	0.46	—	—	—	—	—	—	0.941	<0.1 - 3.9
Silver	—	—	—	—	—	5.2	—	—	NA	NA
Sodium	—	—	—	—	—	—	741	806	17,400	<500 - 50,000
Thallium	—	—	0.43	—	—	—	—	—	13.8	2.2 - 23
Vanadium	9.7	13.7	22.2 <sup>b</sup>	20.6 <sup>b</sup>	179 <sup>b</sup>	33.7	22.0	5.5	140	<7 - 300
Zinc	133	176	223	246	262	223	304	73.3	104	<5 - 2,900
Cyanide	0.82	1.4	—	—	—	3.4	—	—	NA	NA

Note: Samples SED-11 and SED-12 were not analyzed for inorganics. Shaded values exceed the upper limit of the 90th percentile and/or the observed range.

Samples were collected on July 7 and November 30, 1993.

Samples SED-1 through SED-4 were collected from Ley Creek. Sample SED-6 was collected from the outfall of a culvert discharging to Ley Creek. Samples SED-5, SED-7, SED-8, SED-11, and SED-12 were collected from drainages on or adjacent to the site.

Key at end of table.

Table 3-7 (Cont.)

- a Schacklette and Boerngen 1984, except as noted.
- b Concentration is greater than or equal to two times the concentration in the upstream sample, SW-1 (for Ley Creek samples only).
- c Dragun 1988.

Key:

NA = Not available.  
ND = Not detected.



Table 3-8

**ORGANIC COMPOUNDS DETECTED IN SURFACE SOIL SAMPLES  
SALINA TOWN LANDFILL SITE**  
(all values reported in  $\mu\text{g/kg}$ )

Compound	SS-1 <sup>a</sup>	SS-2	SS-3	SS-4	SS-5
<b>Volatiles</b>					
Acetone	—	—	—	12 J	—
<b>Semivolatiles</b>					
Total PAHs	51,000 J	4,800 J	7,300 J	NA	1,300 J
Carbazole	620 J	40 J	100 J	NA	—
Dibenzofuran	170 J	—	52 J	NA	—
<b>Pesticides</b>					
4,4'-DDE	—	—	4.5 J	—	—
Dieldrin	—	—	—	—	4.7 J
4,4'-DDT	—	—	—	—	28
<b>PCBs</b>					
Aroclor 1248	30,000 J,D,C	59	36 J	680 J	—
Aroclor 1254	—	23 J	16 J	280 J	—

Note: Samples were collected on July 7 and November 30 1993.

- a Analyzed for semivolatiles at a dilution factor of 2 and pesticides/PCBs at a dilution factor of 10.  
 b Analyzed for semivolatiles at a dilution factor of 5.

Key at end of table.

**Table 3-8 (Cont.)**

**Key:**

- = Not detected.
- C =
- D = Result from dilution analysis.
- J = Estimated concentration.
- NA = Not analyzed.

Table 3-9

**INORGANIC ANALYTES DETECTED IN SURFACE SOIL SAMPLES  
SALINA TOWN LANDFILL SITE  
(all values reported in mg/kg)**

Analyte	SS-1	SS-2	SS-3	SS-5	Background Concentrations in Eastern U.S. Soils <sup>a</sup>	
					Upper Limit of the 90th Percentile	Observed Range
Aluminum	3,200	4,160	1,900	3,410	128,000	>7,000 - 100,000
Arsenic	15.4	6.1	3.0	3.2	16.0	0.1 - 73
Barium	172	68.8	38.6	66.2	867	10 - 1,500
Beryllium	0.70	0.36	—	0.23	1.81	<1 - 7
Cadmium	6.9	—	—	—	NA	0.01 - 7.0 <sup>b</sup>
Calcium	47,400	81,500	67,400	211,000 <sup>c</sup>	14,400	100 - 280,000
Chromium	1,920	14.2	7.0	13.9	112	1 - 1,000
Cobalt	9.8	7.1	5.3	5.0	19.8	<0.3 - 70
Copper	485	18.7	20.4	21.2	48.7	<1 - 700
Iron	10,400	9,600	5,470	8,940	54,100	100 - >100,000
Lead	330	27.2	25.2	26.3	33.0	<10 - 300
Magnesium	9,160	21,400 <sup>c</sup>	12,500	22,800 <sup>c</sup>	10,700	50 - 50,000
Manganese	197	319	262	254	1,450	<2 - 7,000
Mercury	0.40	—	—	—	0.265	0.01 - 3.4
Nickel	484	12.6	8.6	12.7	38.2	<5 - 700
Potassium	338	615	261	—	23,500	50 - 37,000
Selenium	0.82	—	—	0.35	0.941	<0.1 - 3.9
Silver	4.0	—	—	—	NA	NA
Sodium	627	255	98.4	—	17,400	<500 - 50,000
Thallium	0.42	0.25	—	—	13.8	2.2 - 23
Vanadium	25.7	20.4	5.9	13.3	140	<7 - 300
Zinc	481	40.5	36.2	62.9	104	<5 - 2,900
Cyanide	2.6	0.70	—	—	NA	NA

Note: SS-4 was not analyzed for inorganics.  
Shaded values exceed the upper limit of the 90th percentile and/or the observed range.  
Samples were collected on July 7 and November 30, 1993.

<sup>a</sup> Shacklette and Boerngen 1984, except as noted.

<sup>b</sup> Dragun 1988.

<sup>c</sup> Concentration is greater than two times the concentration in the background sample, SS-1.

Key:

NA = Not available.

ND = Not detected.

Table 3-10

**ORGANIC COMPOUNDS DETECTED IN LEACHATE SAMPLES  
SALINA TOWN LANDFILL**  
(all reported values in  $\mu\text{g/L}$ )

Compound	L-1	L-2	L-3	NYSDEC Class D Surface Water Standard <sup>a</sup>
<b>Volatiles</b>				
1,2-Dichloroethane	7 J	—	—	NA
Benzene	3 J	4 J	4 J	NA
Chlorobenzene	27	20	20	50
<b>Semivolatiles</b>				
1,2-Dichlorobenzene	3 J	—	Not analyzed	50 <sup>b</sup>
1,4-Dichlorobenzene	2 J	2 J	Not analyzed	50 <sup>b</sup>
<b>PCBs</b>				
Aroclor 1232	—	2.6 J	2.5 J	0.001

Note: Shaded values exceed the standard.

Samples were collected on July 7 and November 30, 1993.

<sup>a</sup> NYSDEC 1993.

<sup>b</sup> Standard for dichlorobenzenes.

**Key:**

— = Not detected.

J = Estimated concentration.

NA = Not available.



Table 3-11

# **INORGANIC ANALYTES DETECTED IN LEACHATE SAMPLES** **SALINA TOWN LANDFILL**

(all values reported in  $\mu\text{g/L}$  unless otherwise noted)

Analyte	L-1	L-2	NYSDEC Class D Surface Water Standard <sup>a</sup>
Aluminum	5,830	4,030	NA
Arsenic	1.5	3.1	360 <sup>b</sup>
Barium	982	697	NA
Calcium	232,000	227,000	NA
Chromium	203	124	9,603 <sup>c</sup>
Cobalt	37.7	19.3	NA
Copper	168	116	127 <sup>c</sup>
Iron	153,000	72,700	300
Lead	71.0	63.9	1,162 <sup>c</sup>
Magnesium	57,000	56,500	NA
Manganese	671	485	NA
Mercury	0.32	—	NA
Nickel	116	53.4	9,017 <sup>c</sup>
Potassium	33,000	38,300	NA
Sodium	53,700	56,900	NA
Vanadium	25.4	16.5	190
Zinc	284	201	1,818 <sup>c</sup>
Total hardness (in $\text{mg/L}$ )	814	800	NA

Note: Sample L-3 was not analyzed for inorganics. Shaded values exceed the Class D standards.

Samples were collected on July 30 and November 30, 1993.

<sup>a</sup> NYSDEC 1993.

<sup>b</sup> Dissolved form.

<sup>c</sup> Standard is based on hardness. Average hardness value of 807 ppm was used.

Key:

— = Not detected.

NA = Not analyzed.

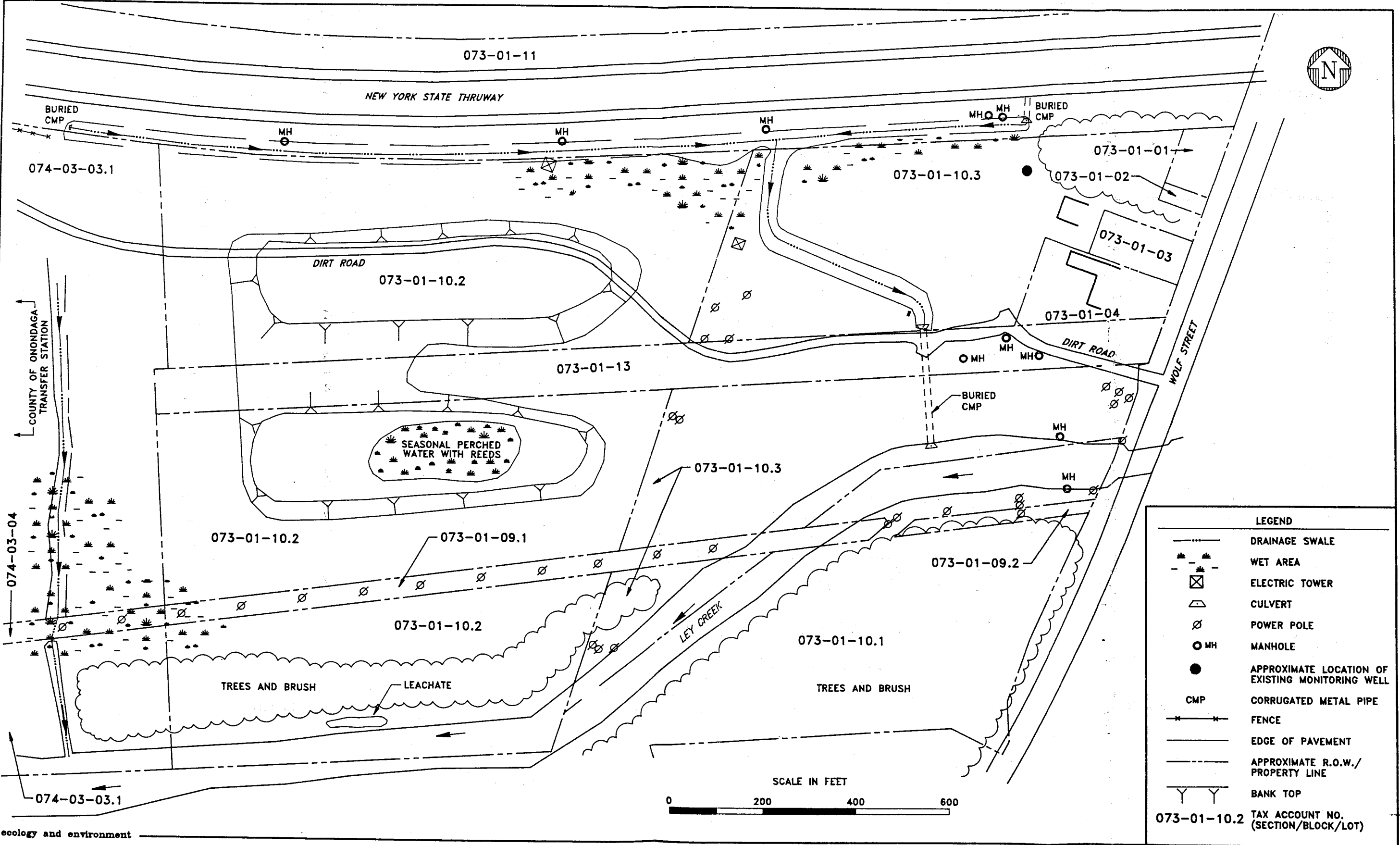


Figure 3-1 SITE PROPERTY BOUNDARY MAP  
SALINA TOWN LANDFILL SITE

## **4. CONCLUSIONS AND RECOMMENDATIONS**

### **4.1 CONCLUSIONS**

Hazardous waste disposal has been documented at the Salina Landfill site in the form of paint sludge, waste paint thinner, and oil-saturated sorbents containing PCBs. In addition, an unknown quantity of potentially hazardous drummed wastes from Carrier Corporation were allegedly disposed of at the site. Hazardous wastes associated with documented disposal have been detected at the site in the form of PCBs at levels greater than 50 ppm (ATL 1987). In addition, hazardous constituents potentially associated with documented disposal have been detected in environmental media at the site.

During the PSA investigation, low levels of chlorinated compounds were detected in surface water and sediment samples from Ley Creek, which is adjacent to the site. PCBs were detected in Ley Creek sediment samples adjacent to the site. The highest concentration of PCBs (Aroclor 1242) was detected in the upstream sediment sample SED-1. Aroclor 1248 was not detected in SED-1, but was found in a sample adjacent to the site. This PCB was also detected in sediment samples from drainage ditches receiving runoff from the site and in a surface soil sample (SS-4) from the site. Also, Aroclor 1254 was detected in sediment sample SED-11 and in surface soil sample SS-4. Leachate discharging directly to Ley Creek from the site contained Aroclor 1232, as well as VOCs and semivolatile organic compounds. Therefore, migration of hazardous constituents from the site to Ley Creek is indicated.

### **4.2 RECOMMENDATIONS**

Because of the documented hazardous waste disposal at the Salina Landfill site, the detection of hazardous constituents associated with documented disposal in environmental

media, and the migration of hazardous constituents to Ley Creek, it is recommended that the Salina Landfill site be reclassified to a Class 2 site.

As part of future investigations at the site, it is further recommended that proper closure of the landfill be completed addressing the following issues:

- Maintenance of a proper cap to eliminate possible direct contact with contaminated materials, leachate, and physical hazards. A properly maintained cap and drainage conditions would also reduce infiltration into the fill material and thereby reduce leachate outbreaks discharging to Ley Creek;
- Installation of fencing and adequate signs to limit public access;
- Installation of leachate collection system to prevent runoff from entering Ley Creek;
- Establishment of a groundwater and surface water monitoring program to determine the nature and extent of contaminants on site and the migration of contaminants off site; and
- Assessment of active and abandoned buried utility lines traversing the site as potential migration pathways.

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Attachment 1		
HORIZONTAL SURVEY COORDINATES SALINA TOWN LANDFILL		
Survey Locations	Northing (feet)	Easting (feet)
<b>Samples</b>		
L-1	1125672.1012	934973.7589
L-2	1125454.8977	934398.0803
L-3	1125453.9283	934424.9812
SS-1	1125753.7528	935793.4774
SS-2	1126512.8179	935806.4637
SS-3	1126572.5242	934010.7250
SS-4	1125454.6800	934374.1052
SS-5	1125779.9543	933709.8551
SW/SED-1	1126083.9252	936153.8555
SW/SED-2	1126058.9894	935551.8332
SW/SED-3	1125556.1004	934890.2934
SW/SED-4	1125378.3843	933828.2348
SW/SED-5	1126717.2954	935319.5797
SW/SED-6	1126090.8522	935617.2297
SW/SED-7	1125840.2983	933942.5817
SW/SED-8	1126724.7956	933993.2876
SW/SED-11	1125779.3868	933735.2779
SW/SED-12	1125405.3628	933792.6487
<b>Control Points</b>		
B <sub>7</sub>	1125354.3400	935818.9200
B <sub>7N</sub>	1125883.3600	936069.3000

Note: Horizontal survey coordinates based on  
 New York State Plane Coordinate  
 System, Central Zone, Transverse  
 Mercator Projection, reference points  
 B<sub>7</sub> and B<sub>7N</sub>.

Reference survey locations to Figure 1-2  
 of PSA report.

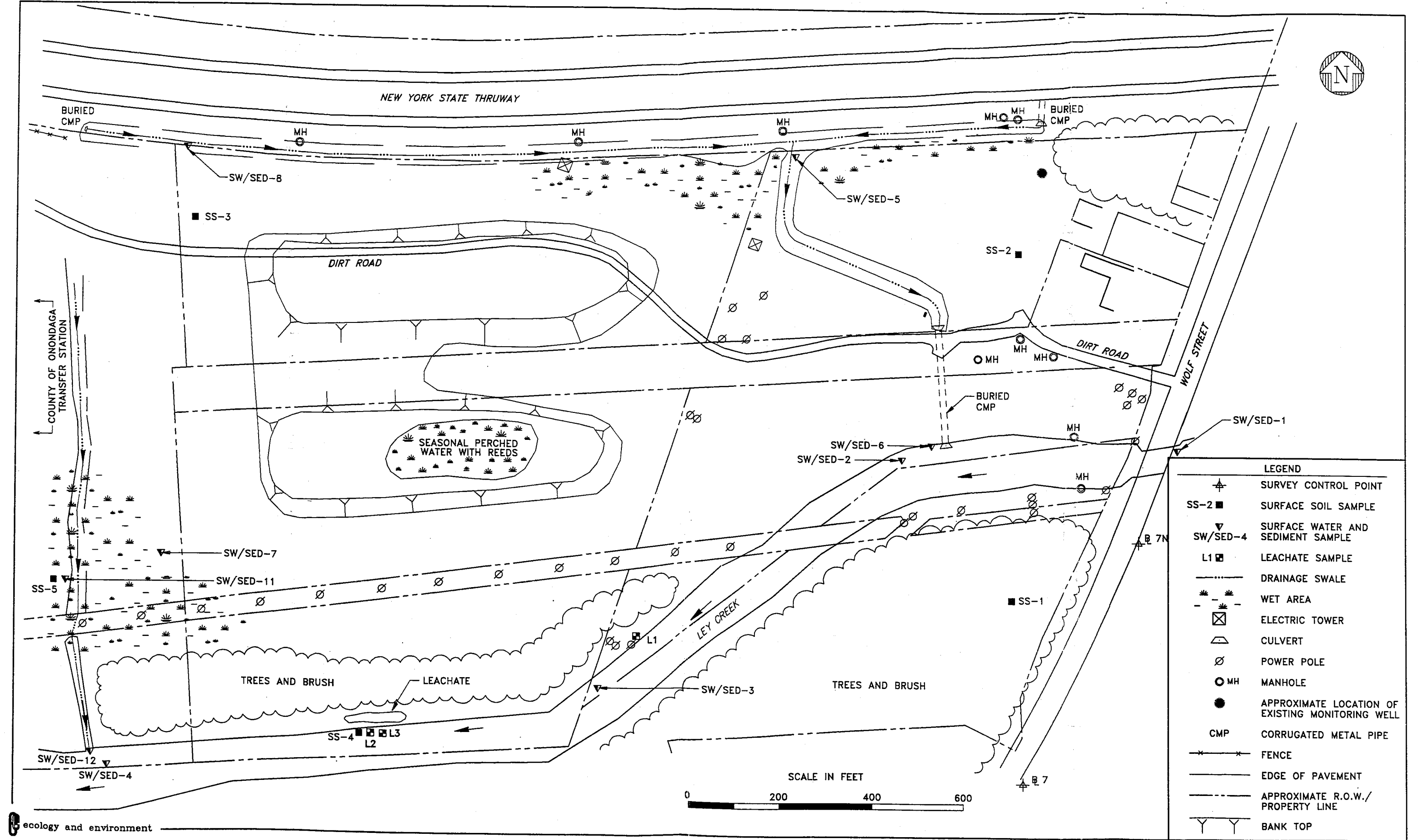


Figure 1-2 SAMPLE LOCATION MAP  
SALINA TOWN LANDFILL SITE

# **ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES IN THE STATE OF NEW YORK**

## **PRELIMINARY SITE ASSESSMENT Volume 2**

**Salina Town Landfill Site  
Site Number 734036  
Town of Salina, Onondaga County**

**May 1994**



Prepared for:

**New York State Department  
of Environmental Conservation**

50 Wolf Road, Albany, New York 12233

*Langdon Marsh, Acting Commissioner*

**Division of Hazardous Waste Remediation**

*Michael J. O'Toole, Jr., P.E., Director*

Prepared by:

**Ecology and Environment Engineering, P.C.**

ENGINEERING INVESTIGATIONS AT  
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PRELIMINARY SITE ASSESSMENT  
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Michael J. O'Toole, Jr., P.E., Director



**ecology and environment  
engineering, p.c.**

**BUFFALO CORPORATE CENTER**  
368 PLEASANTVIEW DRIVE, LANCASTER, NEW YORK 14086, TEL. 716/684-8060

**APPENDIX A**

**EPA 2070-13 SITE INSPECTION FORM**

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT				I. IDENTIFICATION	
PART 1 - SITE LOCATION AND INSPECTION INFORMATION				01 State	02 Site Number
				NY	734036
II. SITE NAME AND LOCATION					
01 Site Name (legal, common, or descriptive name of site) Salina Town Landfill			02 Street, Route No., or specific location identifier Route 11 and Wolf Street		
03 City Town of Salina		04 State NY	05 Zip Code 13088	06 County Onondaga	07 County Code 67
08 Cong. Dist. NY 33					
09 Coordinates Latitude 043° 05' 22" N Longitude 076° 08' 53" W		10 Type of Ownership (check one) <input checked="" type="checkbox"/> A. Private <input type="checkbox"/> B. Federal <input type="checkbox"/> C. State <input type="checkbox"/> D. County <input checked="" type="checkbox"/> E. Municipal <input type="checkbox"/> F. Other <input type="checkbox"/> G. Unknown			
III. INSPECTION INFORMATION					
01 Date of Inspection 07 / 07 / 93 Month Day Year		02 Site Status <input type="checkbox"/> Active <input checked="" type="checkbox"/> Inactive		03 Years of Operation -1960    1974 <input type="checkbox"/> Unknown Beginning Year    Ending Year	
04 Agency Performing Inspection (check all that apply) <input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA Contractor <input type="checkbox"/> C. Municipal <input type="checkbox"/> D. Municipal Contractor <input type="checkbox"/> E. State <input checked="" type="checkbox"/> F. State Contractor Ecology and Environment Engineering, P.C. <input type="checkbox"/> G. Other <div style="display: flex; justify-content: space-between;"> <div>(name of firm)</div> <div>(name of firm)</div> <div>(specify)</div> </div>					
05 Chief Inspector Jim Richert		06 Title Geologist		07 Organization Ecology and Environment Engineering P.C.	
08 Telephone No. (716) 684-8060					
09 Other Inspectors Rick Watt		10 Title Geologist		11 Organization Ecology and Environment Engineering, P.C.	
12 Telephone No. (716) 684-8060					
Frank Mento		Town Engineer		Clough-Harbour	
Valerie Woodward Alyse Pickholtz		Senior Engineering Geologist		NYSDEC	
(518) 457-9538					
Marcia Liao Greg Sinton		Environmental Analyst		(716) 377-1450	
13 Site Representatives Interviewed Carol Boehlert		14 Title Salina Town Supervisor		15 Address 201 School Road, Salina, New York	
16 Telephone No. (315) 457-6661					
Leo F. Kane II		Town Engineer		Calocerinos & Spina Engineers, P.C.	
(315) 457-6711					
17 Access Gained by (check one) <input checked="" type="checkbox"/> Permission <input type="checkbox"/> Warrant		18 Time of Inspection 1100		19 Weather Conditions	
IV. INFORMATION AVAILABLE FROM					
01 Contact Dennis Peck		02 Of (Agency/Organization) Joseph C. Lu, P.E., P.C.			03 Telephone No. (716) 377-1450
04 Person Responsible for Site Inspection Form Dennis Peck		05 Agency	06 Organization Joseph C. Lu, P.E., P.C.	07 Telephone No. (716) 377-1450	08 Date 03 / 08 / 94 Month Day Year

# POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT

## PART 2 - WASTE INFORMATION

### I. IDENTIFICATION

01 State

NY

02 Site Number

734036

### II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

#### 01 Physical States (check all that apply)

- ☒ A. Solid                      ☐ E. Slurry  
☐ B. Powder, Fines        ☒ F. Liquid  
☒ C. Sludge                   ☐ G. Gas  
☐ D. Other \_\_\_\_\_

#### 02 Waste Quantity at Site (measure of waste quantities must be independent)

Tons 36,962 documented hazardous waste

Cubic Yards \_\_\_\_\_

No. of Drums \_\_\_\_\_

#### 03 Waste Characteristics (check all that apply)

- ☒ A. Toxic                      ☒ H. Ignitable  
☐ B. Corrosive               ☒ I. Highly volatile  
☐ C. Radioactive            ☐ J. Explosive  
☒ D. Persistent              ☐ K. Reactive  
☒ E. Soluble                   ☐ L. Incompatible  
☐ F. Infectious              ☐ M. Not applicable  
☐ G. Flammable

### III. WASTE TYPE

Category	Substance Name	01 Gross Amount	02 Unit of Measure	03 Comments
SLU	Sludge	662	tons	paint sludge, paint thinner and reducer
OLW	Oily waste			PCB-contaminated hydraulic oil
SOL	Solvents			
PSD	Pesticides			
OOC	Other organic chemicals			
IOC	Inorganic chemicals			
ACD	Acids			
BAS	Bases			
MES	Heavy metals			

### IV. HAZARDOUS SUBSTANCES (see Appendix for most frequently cited CAS Numbers)

01 Category	02 Substance Name	03 CAS Number	04 Storage/Disposal Method	05 Concentration	06 Measure of Concentration
OLW	PCB		landfilled, mixed with refuse	up to 270 in soil	ppm
MES	Lead		Unknown	251	mg/kg
MES	Cadmium	7440-43-9	Unknown	11.3	mg/kg
OOC	Chrysene	218-01-9	Unknown	5,300	µg/kg
OOC	Fluorene	86-73-7	Unknown	1,000	µg/kg
OOC	Phenanthrene	35-01-3	Unknown	5,700	µg/kg

### V. FEEDSTOCKS (see Appendix for CAS Numbers)

Category	01 Feedstock Name	02 CAS Number	Category	01 Feedstock Name	02 CAS Number
FDS	None		FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

### VI. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)

NUS Corporation, 1986, Final Draft Inspection Report and Hazard Ranking System Salina Town Landfill.  
 General Motors Fisher Guide Division, 1985, Hazardous Waste Generator Questionnaire.

<b>POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT</b>		<b>I. IDENTIFICATION</b>	
<b>PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS</b>		01 State  NY	02 Site Number  734036
<b>II. HAZARDOUS CONDITIONS AND INCIDENTS</b>			
01 <input type="checkbox"/> A. Groundwater Contamination 03 Population Potentially Affected <u>0</u>	02 <input type="checkbox"/> Observed (date _____) 04 Narrative Description:	<input checked="" type="checkbox"/> Potential	<input type="checkbox"/> Alleged
Iron and manganese levels in a groundwater sample exceeded New York State groundwater standards, but these were from a well upgradient of the landfill. Vertical migration of leachate could potentially contaminate the shallow sand and gravel till aquifer.			
01 <input type="checkbox"/> B. Surface Water Contamination 03 Population Potentially Affected <u>47,442</u>	02 <input type="checkbox"/> Observed (date _____) 04 Narrative Description:	<input checked="" type="checkbox"/> Potential	<input type="checkbox"/> Alleged
Leachate was observed migrating from landfill into Ley Creek. Upstream and downstream sampling in 1986 found no greater contamination downstream, compared to upstream.			
01 <input type="checkbox"/> C. Contamination of Air 03 Population Potentially Affected <u>0</u>	02 <input type="checkbox"/> Observed (date _____) 04 Narrative Description:	<input type="checkbox"/> Potential	<input type="checkbox"/> Alleged
During site inspections in 1986, 1991, and 1993, no readings above background levels were detected on OVA, HNu, or minirad. No potential is known to exist.			
01 <input type="checkbox"/> D. Fire/Explosive Conditions 03 Population Potentially Affected <u>0</u>	02 <input type="checkbox"/> Observed (date _____) 04 Narrative Description:	<input type="checkbox"/> Potential	<input type="checkbox"/> Alleged
Site is capped; the local fire marshall has not declared site a fire hazard.			
01 <input type="checkbox"/> E. Direct Contact 03 Population Potentially Affected <u>13,167</u>	02 <input type="checkbox"/> Observed (date <u>May 2, 1991</u> ) 04 Narrative Description:	<input checked="" type="checkbox"/> Potential	<input type="checkbox"/> Alleged
No fence around site, although Ley Creek and Thruway act as barriers. The entrance gate was found open upon arrival during site inspection in 1919. 300 feet along Wolf Street has no barrier to restrict access.			
01 <input checked="" type="checkbox"/> F. Contamination of Soil 03 Area Potentially Affected <u>50 acres</u>	02 <input checked="" type="checkbox"/> Observed (date <u>1986, 1987</u> ) 04 Narrative Description:	<input type="checkbox"/> Potential	<input type="checkbox"/> Alleged
PCBs were found in surface and subsurface soil at levels of 270, 74, 11, 4.9, 3.6, and 1.4 ppm. Also, elevated levels of PAHs and heavy metals were detected.			
01 <input type="checkbox"/> G. Drinking Water Contamination 03 Population Potentially Affected <u>0</u>	02 <input type="checkbox"/> Observed (date _____) 04 Narrative Description:	<input type="checkbox"/> Potential	<input type="checkbox"/> Alleged
No groundwater drinking wells are used within 4 miles; surface drinking water supplies are located more than 3 miles away - Skaneateles Lake, Otiaka Lake, and Lake Ontario.			
01 <input type="checkbox"/> H. Worker Exposure/Injury 03 Workers Potentially Affected <u>0</u>	02 <input type="checkbox"/> Observed (date _____) 04 Narrative Description:	<input type="checkbox"/> Potential	<input type="checkbox"/> Alleged
Site is closed and capped, no workers on site.			
01 <input type="checkbox"/> I. Population Exposure/Injury 03 Population Potentially Affected <u>97,442</u>	02 <input type="checkbox"/> Observed (date _____) 04 Narrative Description:	<input checked="" type="checkbox"/> Potential	<input type="checkbox"/> Alleged
Ley Creek and Onondaga Lake are used for recreation.			



<b>POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT</b>		<b>I. IDENTIFICATION</b>	
<b>PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS</b>		01 State  NY	02 Site Number  734036

<b>II. HAZARDOUS CONDITIONS AND INCIDENTS (Cont.)</b>			
01 <input type="checkbox"/> J. Damage to Flora 04 Narrative Description:  Leachate migration could potentially affect flora in the area.	02 <input type="checkbox"/> Observed (date _____)	<input checked="" type="checkbox"/> Potential <input type="checkbox"/> Alleged	
01 <input type="checkbox"/> K. Damage to Fauna 04 Narrative Description:  Fauna having contact with leachate, as well as fish and other animals utilizing Ley Creek could potentially be affected.	02 <input type="checkbox"/> Observed (date _____)	<input checked="" type="checkbox"/> Potential <input type="checkbox"/> Alleged	
01 <input checked="" type="checkbox"/> L. Contamination of Food Chain 04 Narrative Description:  Fish bioaccumulation of PCBs, cadmium, and mercury could occur. PCB contamination of fish in Ley Creek and Onondaga Lake is documented, but the source of PCBs is unknown.	02 <input checked="" type="checkbox"/> Observed (date <u>July 1989</u> )	<input checked="" type="checkbox"/> Potential <input checked="" type="checkbox"/> Alleged	
01 <input checked="" type="checkbox"/> M. Unstable Containment of Wastes (spills/ runoff/standing liquids, leaking drums) 03 Population Potentially Affected: <u>97,442</u> 04 Narrative Description:  Leachate was observed migrating to Ley Creek. Standing water observed on hill top and many wetland areas.	02 <input checked="" type="checkbox"/> Observed (date <u>7/1/86 and 5/2/91</u> )	<input checked="" type="checkbox"/> Potential <input type="checkbox"/> Alleged	
01 <input checked="" type="checkbox"/> N. Damage to Off-site Property 04 Narrative Description:  Leachate migrating to Ley Creek could damage creek and downstream property.	02 <input checked="" type="checkbox"/> Observed (date <u>7/1/86 and 5/2/91</u> )	<input checked="" type="checkbox"/> Potential <input type="checkbox"/> Alleged	
01 <input type="checkbox"/> O. Contamination of Sewers, Storm Drains, WWTPs 04 Narrative Description:	02 <input type="checkbox"/> Observed (date _____)	<input checked="" type="checkbox"/> Potential <input type="checkbox"/> Alleged	
01 <input type="checkbox"/> P. Illegal/Unauthorized Dumping 04 Narrative Description:  No evidence or recorded incident of past illegal/unauthorized dumping was found. Illegal dumping could occur, since access to site is easy via Wolf Street. No significant illegal dumping was found at time of E & E inspection in 1991.	02 <input type="checkbox"/> Observed (date _____)	<input type="checkbox"/> Potential <input type="checkbox"/> Alleged	
05 Description of Any Other Known, Potential, or Alleged Hazards			
<b>III. TOTAL POPULATION POTENTIALLY AFFECTED</b> <u>97,442</u>			
<b>IV. COMMENTS</b>  The Town of Salina received several violation notices during the operation of the landfill, for poor operation and non-compliance with NYSDEC regulations.			
<b>V. SOURCES OF INFORMATION</b> (cite specific references, e.g., state files, sample analysis, reports)			
OCHD, NYSDEC, and EPA Analytical Data, 1986 and 1987. Ecology and Environment Engineering, P.C., Site Inspection, May 2, 1991. NUS Corporation, 1986, Final Draft Site Inspection Report and Hazard Ranking System Model. General Motors Corporation, 1989, Ley Creek Dredged Material Area Report and Field Investigation.			

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT		I. IDENTIFICATION		
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION		01 State NY	02 Site Number 734036	
II. PERMIT INFORMATION				
01 Type of Permit Issued (check all that apply)	02 Permit Number	03 Date Issued	04 Expiration Date	05 Comments
<input type="checkbox"/> A. NPDES				
<input type="checkbox"/> B. UIC				
<input type="checkbox"/> C. AIR				
<input type="checkbox"/> D. RCRA				
<input type="checkbox"/> E. RCRA Interim Status				
<input type="checkbox"/> F. SPCC Plan				
<input type="checkbox"/> G. State (specify)				
<input type="checkbox"/> H. Local (specify)				
<input type="checkbox"/> I. Other (specify)				
<input checked="" type="checkbox"/> J. None				
III. SITE DESCRIPTION				
01 Storage Disposal (check all that apply)	02 Amount	03 Unit of Measure	04 Treatment (check all that apply)	05 Other <input type="checkbox"/> Buildings On Site
<input type="checkbox"/> A. Surface Impoundment	_____	_____	<input type="checkbox"/> A. Incineration	
<input type="checkbox"/> B. Piles	_____	_____	<input type="checkbox"/> B. Underground Injection	
<input type="checkbox"/> C. Drum, Aboveground	_____	_____	<input type="checkbox"/> C. Chemical/Physical	
<input type="checkbox"/> D. Tank, Aboveground	_____	_____	<input type="checkbox"/> D. Biological	
<input type="checkbox"/> E. Tank, Belowground	_____	_____	<input type="checkbox"/> E. Waste Oil Processing	
<input checked="" type="checkbox"/> F. Landfill	36,962	tons	<input type="checkbox"/> F. Solvent Recovery	
<input type="checkbox"/> G. Landfarm	_____	_____	<input type="checkbox"/> G. Other Recycling Recovery	
<input type="checkbox"/> H. Open Dump	_____	_____	<input checked="" type="checkbox"/> H. Other <u>None</u>	
<input type="checkbox"/> I. Other _____ (specify)			(specify)	
06 Area of Site _____ 50 _____ Acres				
07 Comments Site was a municipal sanitary landfill operated by the Town of Salina. It received several notices of violations for non-compliance with state regulations during its active life. The site received PCB-laden wastes. Site was closed in 1974, and final grading and capping was completed in 1982. One upgradient monitoring well exists on site. Leachate outbreaks have been observed in the past and during the E & E site inspection in 1991.				
IV. CONTAINMENT				
01 Containment of Wastes (check one) <input type="checkbox"/> A. Adequate, Secure <input checked="" type="checkbox"/> B. Moderate <input type="checkbox"/> C. Inadequate, Poor <input type="checkbox"/> D. Insecure, Unsound, Dangerous				
02 Description of Drums, Diking, Liners, Barriers, etc. Site has occasional ponding of surface water; no drainage barriers were observed between landfill and creek; grassy cover/cap looks adequate in most places.				
V. ACCESSIBILITY				
01 Waste Easily Accessible <input type="checkbox"/> Yes <input type="checkbox"/> No				
02 Comments Landfill is capped, with adequate grassy cover. Leachate has been observed by creek and in on-site ditch. No fence surrounding site entrance on Wolf Street, although New York State Thruway and Ley Creek act as barriers to public access.				
VI. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)				
NUS Corporation, 1986, Final Draft Site Inspection Report and Hazard Ranking System Model NYSDEC file search, Onondaga County Health Department, Town of Salina files. Ecology and Environment Engineering, P.C., site inspection, 1991.				

<b>POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT</b>  <b>PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA</b>						<b>I. IDENTIFICATION</b>																									
						01 State NY	02 Site Number 734036																								
<b>II. DRINKING WATER SUPPLY</b>																															
01 Type of Drinking Supply (check as applicable)			02 Status			03 Distance to Site																									
<table style="width: 100%; border: none;"> <tr> <td style="width: 30%;"></td> <td style="width: 20%;">Surface</td> <td style="width: 20%;">Well</td> <td style="width: 20%;">Endangered</td> <td style="width: 20%;">Affected</td> <td style="width: 20%;">Monitored</td> </tr> <tr> <td>Community</td> <td>A. <input checked="" type="checkbox"/></td> <td>B. <input type="checkbox"/></td> <td>A. <input type="checkbox"/></td> <td>B. <input type="checkbox"/></td> <td>C. <input type="checkbox"/></td> </tr> <tr> <td>Non-community</td> <td>C. <input type="checkbox"/></td> <td>D. <input checked="" type="checkbox"/></td> <td>D. <input type="checkbox"/></td> <td>E. <input type="checkbox"/></td> <td>F. <input type="checkbox"/></td> </tr> </table>				Surface	Well	Endangered	Affected	Monitored	Community	A. <input checked="" type="checkbox"/>	B. <input type="checkbox"/>	A. <input type="checkbox"/>	B. <input type="checkbox"/>	C. <input type="checkbox"/>	Non-community	C. <input type="checkbox"/>	D. <input checked="" type="checkbox"/>	D. <input type="checkbox"/>	E. <input type="checkbox"/>	F. <input type="checkbox"/>	<table style="width: 100%; border: none;"> <tr> <td style="width: 30%;">A. <input type="checkbox"/></td> <td style="width: 20%;">B. <input type="checkbox"/></td> <td style="width: 20%;">C. <input type="checkbox"/></td> </tr> <tr> <td>D. <input type="checkbox"/></td> <td>E. <input type="checkbox"/></td> <td>F. <input type="checkbox"/></td> </tr> </table>			A. <input type="checkbox"/>	B. <input type="checkbox"/>	C. <input type="checkbox"/>	D. <input type="checkbox"/>	E. <input type="checkbox"/>	F. <input type="checkbox"/>	A. <u>&gt;4</u> (mi) B. <u>-4</u> (mi)	
	Surface	Well	Endangered	Affected	Monitored																										
Community	A. <input checked="" type="checkbox"/>	B. <input type="checkbox"/>	A. <input type="checkbox"/>	B. <input type="checkbox"/>	C. <input type="checkbox"/>																										
Non-community	C. <input type="checkbox"/>	D. <input checked="" type="checkbox"/>	D. <input type="checkbox"/>	E. <input type="checkbox"/>	F. <input type="checkbox"/>																										
A. <input type="checkbox"/>	B. <input type="checkbox"/>	C. <input type="checkbox"/>																													
D. <input type="checkbox"/>	E. <input type="checkbox"/>	F. <input type="checkbox"/>																													
<b>III. GROUNDWATER</b>																															
01 Groundwater Use in Vicinity (check one)																															
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%;"><input type="checkbox"/> A. Only Source for Drinking</td> <td style="width: 33%;"><input type="checkbox"/> B. Drinking (other sources available) Commercial, Industrial, Irrigation (no other water sources available)</td> <td style="width: 33%;"><input type="checkbox"/> C. Commercial, Industrial, Irrigation (limited other sources available)</td> <td style="width: 33%;"><input checked="" type="checkbox"/> D. Not Used, Unusable</td> </tr> </table>								<input type="checkbox"/> A. Only Source for Drinking	<input type="checkbox"/> B. Drinking (other sources available) Commercial, Industrial, Irrigation (no other water sources available)	<input type="checkbox"/> C. Commercial, Industrial, Irrigation (limited other sources available)	<input checked="" type="checkbox"/> D. Not Used, Unusable																				
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02 Population Served by Groundwater <u>0</u>				03 Distance to Nearest Drinking Water Well <u>-4</u> (mi)																											
04 Depth to Groundwater  <u>1 to 4</u> (ft)	05 Direction of Groundwater Flow  <u>South-southwest</u>		06 Depth to Aquifer of Concern  <u>~1</u> (ft)	07 Potential Yield of Aquifer  <u>Unknown</u> (gpd)	08 Sole Source Aquifer <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown																										
09 Description of Wells (including usage, depth, and location relative to population and buildings)																															
No groundwater wells are used for drinking water within 4 miles. Aquifer is the Tully aquifer, composed of sand and gravel. Groundwater was found at a depth of 4 feet during on-site well drilling.																															
10 Recharge Area  <input checked="" type="checkbox"/> Yes   Comments: Landfill is in recharge area for Tully aquifer. <input type="checkbox"/> No				11 Discharge Area  <input type="checkbox"/> Yes   Comments: <input checked="" type="checkbox"/> No																											
<b>IV. SURFACE WATER</b>																															
01 Surface Water (check one)																															
<table style="width: 100%; border: none;"> <tr> <td style="width: 25%;"><input checked="" type="checkbox"/> A. Reservoir, Recreation, Drinking Water Source</td> <td style="width: 25%;"><input type="checkbox"/> B. Irrigation, Economically Important Resources</td> <td style="width: 25%;"><input type="checkbox"/> C. Commercial, Industrial</td> <td style="width: 25%;"><input type="checkbox"/> D. Not Currently Used</td> </tr> </table>								<input checked="" type="checkbox"/> A. Reservoir, Recreation, Drinking Water Source	<input type="checkbox"/> B. Irrigation, Economically Important Resources	<input type="checkbox"/> C. Commercial, Industrial	<input type="checkbox"/> D. Not Currently Used																				
<input checked="" type="checkbox"/> A. Reservoir, Recreation, Drinking Water Source	<input type="checkbox"/> B. Irrigation, Economically Important Resources	<input type="checkbox"/> C. Commercial, Industrial	<input type="checkbox"/> D. Not Currently Used																												
02 Affected/Potentially Affected Bodies of Water																															
Name:						Affected	Distance to Site																								
<u>Ley Creek</u>						<input type="checkbox"/>	<u>adjacent, south</u> (mi)																								
<u>Onondaga Lake</u>						<input type="checkbox"/>	<u>1.8</u> (mi)																								
						<input type="checkbox"/>	<u>                    </u> (mi)																								
<b>V. DEMOGRAPHIC AND PROPERTY INFORMATION</b>																															
01 Total Population Within		One (1) Mile of Site		Two (2) Miles of Site		Three (3) Miles of Site																									
A. <u>13,167</u> No. of Persons		B. <u>51,346</u> No. of Persons		C. <u>97,442</u> No. of Persons		02 Distance to Nearest Population  <u>0.28</u> (mi)																									
03 Number of Buildings Within Two (2) Miles of Site  <u>20,954</u>						04 Distance to Nearest Off-Site Building  <u>0.28</u> (mi)																									
05 Population Within Vicinity of Site (provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)																															
Population within a 3-mile radius resides in urban residential neighborhoods intermingled with some commercially zoned areas.																															

<b>POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT</b>		<b>I. IDENTIFICATION</b>	
<b>PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA</b>		01 State  NY	02 Site Number  734036

<b>VI. ENVIRONMENTAL INFORMATION</b>											
01 Permeability of Unsaturated Zone (check one)											
<input type="checkbox"/> A. Impermeable (less than $10^{-6}$ cm/sec)	<input type="checkbox"/> B. Relatively Impermeable ( $10^{-4}$ - $10^{-6}$ cm/sec)	<input checked="" type="checkbox"/> C. Relatively Permeable ( $10^{-2}$ - $10^{-4}$ cm/sec)	<input type="checkbox"/> D. Very Permeable (greater than $10^{-2}$ cm/sec)								
02 Permeability of Bedrock (check one)											
<input type="checkbox"/> A. Impermeable (less than $10^{-6}$ cm/sec)	<input checked="" type="checkbox"/> B. Relatively Impermeable ( $10^{-4}$ - $10^{-6}$ cm/sec)	<input type="checkbox"/> C. Relatively Permeable ( $10^{-2}$ - $10^{-4}$ cm/sec)	<input type="checkbox"/> D. Very Permeable (greater than $10^{-2}$ cm/sec)								
03 Depth to Bedrock  <u>&gt; 10</u> (ft)	04 Depth of Contaminated Soil Zone  <u>Wastes encountered as deep as 10 feet; possibly deeper</u> (ft)		05 Soil pH  <u>5-7</u>								
06 Net Precipitation  <u>9</u> (in)	07 One Year 24-Hour Rainfall  <u>2.5</u> (in)	08 Slope Site Slope                      Direction of Site Slope                      Terrain Average Slope <u>3.3</u> % <u>S-SW</u> <u>(fairly flat)</u> %									
09 Flood Potential  Site is in <u>50</u> Year Floodplain	10 <input type="checkbox"/> Site is on Barrier Island, Coastal High Hazard Area, Riverine Floodway										
11 Distance to Wetlands (5 acre minimum)  ESTUARINE                      OTHER  A. <u>&gt; 2</u> (mi)    B. <u>adjacent</u> (mi)		12 Distance to Critical Habitat (of endangered species)  Rare plant may occur in vicinity.  Endangered Species: <u>Cornel-leaved Aster (Aster infirmus)</u>									
13 Land Use in Vicinity  Distance to: <table style="width: 100%; border: none;"> <tr> <td style="width: 25%; border: none;">COMMERCIAL/INDUSTRIAL</td> <td style="width: 25%; border: none;">RESIDENTIAL AREAS, NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES</td> <td style="width: 25%; border: none;">PRIME AG LAND</td> <td style="width: 25%; border: none;">AGRICULTURAL LANDS AG LAND</td> </tr> <tr> <td style="border: none;">A. <u>&lt; 0.5</u> (mi)</td> <td style="border: none;">B. <u>Residential &lt; 0.25</u> (mi)</td> <td style="border: none;">C. <u>&gt; 3</u> (mi)</td> <td style="border: none;">D. <u>&gt; 3</u> (mi)</td> </tr> </table>				COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS, NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	PRIME AG LAND	AGRICULTURAL LANDS AG LAND	A. <u>&lt; 0.5</u> (mi)	B. <u>Residential &lt; 0.25</u> (mi)	C. <u>&gt; 3</u> (mi)	D. <u>&gt; 3</u> (mi)
COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS, NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	PRIME AG LAND	AGRICULTURAL LANDS AG LAND								
A. <u>&lt; 0.5</u> (mi)	B. <u>Residential &lt; 0.25</u> (mi)	C. <u>&gt; 3</u> (mi)	D. <u>&gt; 3</u> (mi)								
14 Description of Site in Relation to Surrounding Topography  The landfill encompasses approximately 50 acres situated in a floodprone area adjacent to Ley Creek. Site has rolling hills and some steeper grades also, near the creek bank. Regional topography has a 0% to 3% slope in a south-southwesterly direction.											

<b>VII. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)</b>
Atlantic Testing Company, 1987, well drilling reports/diagrams New York Heritage Program, Significance Habitat Unit, 1991, correspondence NUS Corporation, 1986, Final Draft Inspection Report and Hazard Ranking System Model

# **POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT**

## **PART 6 - SAMPLE AND FIELD INFORMATION**

### **I. IDENTIFICATION**

01 State

NY

02 Site Number

734036

### **II. SAMPLES TAKEN**

Sample Type	01 Number of Samples Taken	02 Samples Sent To	03 Estimated Date Results Available
Groundwater			
Surface Water	10	Ecology and Environment ASC	April 1994
Waste			
Air			
Runoff			
Spill			
Soil and Sediment	15	Ecology and Environment ASC	April 1994
Vegetation			
Leachate	3	Ecology and Environment ASC	April 1994

### **III. FIELD MEASUREMENTS TAKEN**

01 Type	02 Comments
Photoionization detector (HNu)	No readings above background levels were detected on either instrument on May 2, 1991 or July 7, 1993.
Minirad	

### **IV. PHOTOGRAPHS AND MAPS**

01 Type	<input checked="" type="checkbox"/> Ground <input type="checkbox"/> Aerial	02 In Custody of	<u>Ecology and Environment Engineering, P.C., Lancaster, New York</u> (name of organization or individual)

03 Maps	04 Location of Maps
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Ecology and Environment Engineering, P.C., Lancaster, New York</u>

### **V. OTHER FIELD DATA COLLECTED (provide narrative description of sampling activities)**

Logbook notes, May 2, 1991, July 7, 1993, and November 30, 1993.

### **VI. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)**

Ecology and Environment Engineering, P.C., site inspection, May 2, 1991, and July 7, 1993.

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT				I. IDENTIFICATION			
PART 7 - OWNER INFORMATION				01 State NY		02 Site Number 734036	
II. CURRENT OWNER(S)				PARENT COMPANY (if applicable)			
01 Name Town of Salina		02 D&B Number		08 Name		09 D&B Number	
03 Street Address (P.O. Box, RFD #, etc.) 201 School Road		04 SIC Code		10 Street Address (P.O. Box, RFD #, etc.)		11 SIC Code	
05 City Liverpool		06 State NY		07 Zip Code 13088		12 City	
13 State		14 Zip Code		08 Name		09 D&B Number	
01 Name		02 D&B Number		08 Name		09 D&B Number	
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code		10 Street Address (P.O. Box, RFD #, etc.)		11 SIC Code	
05 City		06 State		07 Zip Code		12 City	
13 State		14 Zip Code		08 Name		09 D&B Number	
01 Name		02 D&B Number		08 Name		09 D&B Number	
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code		10 Street Address (P.O. Box, RFD #, etc.)		11 SIC Code	
05 City		06 State		07 Zip Code		12 City	
13 State		14 Zip Code		08 Name		09 D&B Number	
01 Name		02 D&B Number		08 Name		09 D&B Number	
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code		10 Street Address (P.O. Box, RFD #, etc.)		11 SIC Code	
05 City		06 State		07 Zip Code		12 City	
13 State		14 Zip Code		08 Name		09 D&B Number	
III. PREVIOUS OWNER(S) (list most recent first)				IV. REALTY OWNER(S) (if applicable, list most recent first)			
01 Name East Plaza, Inc. (until 1981)		02 D&B Number		01 Name		02 D&B Number	
03 Street Address (P.O. Box, RFD #, etc.) unknown/unlisted		04 SIC Code		03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code	
05 City		06 State		07 Zip Code		05 City	
06 State		07 Zip Code		05 City		06 State	
01 Name		02 D&B Number		01 Name		02 D&B Number	
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code		03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code	
05 City		06 State		07 Zip Code		05 City	
06 State		07 Zip Code		05 City		06 State	
01 Name		02 D&B Number		01 Name		02 D&B Number	
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code		03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code	
05 City		06 State		07 Zip Code		05 City	
06 State		07 Zip Code		05 City		06 State	
01 Name		02 D&B Number		01 Name		02 D&B Number	
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code		03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code	
05 City		06 State		07 Zip Code		05 City	
06 State		07 Zip Code		05 City		06 State	
V. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)							
Post Standard Newspaper, 3/6/81, "Suit Settled on Landfill," by J. Pavis. NUS Corporation, 1986, Final Draft Site Inspection Report and Hazard Ranking System Model.							

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT				I. IDENTIFICATION	
PART 8 - OPERATOR INFORMATION				01 State NY	02 Site Number 734036
II. CURRENT OPERATOR (provide if different from owner)				OPERATOR'S PARENT COMPANY (if applicable)	
01 Name None		02 D&B Number		10 Name	11 D&B Number
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code		12 Street Address (P.O. Box, RFD #, etc.)	
05 City		06 State	07 Zip Code	14 City	15 State
08 Years of Operation		09 Name of Owner			
III. PREVIOUS OPERATOR(S) (list most recent first; provide if different from owner)				PREVIOUS OPERATORS' PARENT COMPANIES (if applicable)	
01 Name Town of Salina		02 D&B Number		10 Name	11 D&B Number
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code		12 Street Address (P.O. Box, RFD #, etc.)	
05 City		06 State	07 Zip Code	14 City	15 State
08 Years of Operation		09 Name of Owner During this Period			
01 Name		02 D&B Number		10 Name	11 D&B Number
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code		12 Street Address (P.O. Box, RFD #, etc.)	
05 City		06 State	07 Zip Code	14 City	15 State
08 Years of Operation		09 Name of Owner During this Period			
01 Name		02 D&B Number		10 Name	11 D&B Number
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code		12 Street Address (P.O. Box, RFD #, etc.)	
05 City		06 State	07 Zip Code	14 City	15 State
08 Years of Operation		09 Name of Owner During this Period			
01 Name		02 D&B Number		10 Name	11 D&B Number
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code		12 Street Address (P.O. Box, RFD #, etc.)	
05 City		06 State	07 Zip Code	14 City	15 State
08 Years of Operation		09 Name of Owner During this Period			
IV. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)					
Site is closed and capped.					

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT				I. IDENTIFICATION	
PART 9 - GENERATOR/TRANSPORTER INFORMATION				01 State	02 Site Number
				NY	734036
II. ON-SITE GENERATOR					
01 Name None		02 D&B Number			
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code			
05 City		06 State			
		07 Zip Code			
III. OFF-SITE GENERATOR(S)					
01 Name General Motors Fisher Guide Division		02 D&B Number		01 Name	
				02 D&B Number	
03 Street Address (P.O. Box, RFD #, etc.) 1000 Townline Road		04 SIC Code		03 Street Address (P.O. Box, RFD #, etc.)	
				04 SIC Code	
05 City Syracuse		06 State NY		07 Zip Code 13221-4889	
01 Name Crouse Hinds Company		02 D&B Number		01 Name	
				02 D&B Number	
03 Street Address (P.O. Box, RFD #, etc.) Wolf and 7th North Streets		04 SIC Code		03 Street Address (P.O. Box, RFD #, etc.)	
				04 SIC Code	
05 City Syracuse		06 State NY		07 Zip Code	
01 Name A&T Haulers, Inc.		02 D&B Number		01 Name Leaseway Haulers, Inc.	
				02 D&B Number	
03 Street Address (P.O. Box, RFD #, etc.) 6267 East Taft Road		04 SIC Code		03 Street Address (P.O. Box, RFD #, etc.) unknown/unlisted	
				04 SIC Code	
05 City North Syracuse		06 State NY		07 Zip Code	
01 Name Mattheison Trash Service		02 D&B Number		01 Name	
				02 D&B Number	
03 Street Address (P.O. Box, RFD #, etc.) unknown/unlisted		04 SIC Code		03 Street Address (P.O. Box, RFD #, etc.)	
				04 SIC Code	
05 City		06 State		07 Zip Code	
05 City		06 State		07 Zip Code	
V. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)					
<p>NYNEX, 1990-1991, Yellow Pages and White Pages for Syracuse Metropolitan area.  Letter from F.J. Giacobbi (GMGF Plant Engineer) to Larry Gross (NYSDEC), 4/3/86  Onondaga County Health Department, 1972, Sanitary Landfill Study, Town of Salina.</p>					



# POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT

## PART 10 - PAST RESPONSE ACTIVITIES

### I. IDENTIFICATION

01 State

NY

02 Site Number

734036

### II. PAST RESPONSE ACTIVITIES

01 ☐ A. Water Supply Closed

04 Description:

02 Date \_\_\_\_\_

03 Agency \_\_\_\_\_

01 ☐ B. Temporary Water Supply Provided

04 Description:

02 Date \_\_\_\_\_

03 Agency \_\_\_\_\_

01 ☐ C. Permanent Water Supply Provided

04 Description:

02 Date \_\_\_\_\_

03 Agency \_\_\_\_\_

01 ☐ D. Spilled Material Removed

04 Description:

02 Date \_\_\_\_\_

03 Agency \_\_\_\_\_

01 ☐ E. Contaminated Soil Removed

04 Description:

02 Date \_\_\_\_\_

03 Agency \_\_\_\_\_

01 ☐ F. Waste Repackaged

04 Description:

02 Date \_\_\_\_\_

03 Agency \_\_\_\_\_

01 ☐ G. Waste Disposed Elsewhere

04 Description:

02 Date \_\_\_\_\_

03 Agency \_\_\_\_\_

01 ☐ H. On-Site Burial

04 Description:

02 Date \_\_\_\_\_

03 Agency \_\_\_\_\_

01 ☐ I. In Situ Chemical Treatment

04 Description:

02 Date \_\_\_\_\_

03 Agency \_\_\_\_\_

01 ☐ J. In Situ Biological Treatment

04 Description:

02 Date \_\_\_\_\_

03 Agency \_\_\_\_\_

01 ☐ K. In Situ Physical Treatment

04 Description:

02 Date \_\_\_\_\_

03 Agency \_\_\_\_\_

01 ☐ L. Encapsulation

04 Description:

02 Date \_\_\_\_\_

03 Agency \_\_\_\_\_

01 ☐ M. Emergency Waste Treatment

04 Description:

02 Date \_\_\_\_\_

03 Agency \_\_\_\_\_

01 ☐ N. Cutoff Walls

04 Description:

02 Date \_\_\_\_\_

03 Agency \_\_\_\_\_

01 ☒ O. Emergency Diking/Surface Water Diversion

04 Description:

02 Date \_\_\_\_\_

03 Agency \_\_\_\_\_

Drainage ditch and 48-inch covered culvert was constructed in 1981-1982 to facilitate surface drainage from areas north of the site (i.e., NYS Thruway) to Ley Creek. This was not due to emergency, however.

01 ☐ P. Cutoff Trenches/Sump

04 Description:

02 Date \_\_\_\_\_

03 Agency \_\_\_\_\_

<b>POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT</b>  <b>PART 10 - PAST RESPONSE ACTIVITIES</b>		<b>I. IDENTIFICATION</b>	
		01 State  NY	02 Site Number  734036
<b>II. PAST RESPONSE ACTIVITIES (Cont.)</b>			
01 <input type="checkbox"/> Q. Subsurface Cutoff Wall 04 Description:	02 Date _____	03 Agency _____	
01 <input type="checkbox"/> R. Barrier Walls Constructed 04 Description:	02 Date _____	03 Agency _____	
01 <input checked="" type="checkbox"/> S. Capping/Covering 04 Description: Site was closed and had a partial vegetative cover starting in 1974. Site was regraded and capped in 1981 to 1982.	02 Date _____	03 Agency _____	
01 <input type="checkbox"/> T. Bulk Tankage Repaired 04 Description:	02 Date _____	03 Agency _____	
01 <input type="checkbox"/> U. Grout Curtain Constructed 04 Description:	02 Date _____	03 Agency _____	
01 <input type="checkbox"/> V. Bottom Sealed 04 Description:	02 Date _____	03 Agency _____	
01 <input type="checkbox"/> W. Gas Control 04 Description:	02 Date _____	03 Agency _____	
01 <input type="checkbox"/> X. Fire Control 04 Description:	02 Date _____	03 Agency _____	
01 <input type="checkbox"/> Y. Leachate Treatment 04 Description:	02 Date _____	03 Agency _____	
01 <input type="checkbox"/> Z. Area Evacuated 04 Description:	02 Date _____	03 Agency _____	
01 <input type="checkbox"/> 1. Access to Site Restricted 04 Description:	02 Date _____	03 Agency _____	
01 <input type="checkbox"/> 2. Population Relocated 04 Description:	02 Date _____	03 Agency _____	
01 <input type="checkbox"/> 3. Other Remedial Activities 04 Description: No others found in PSA investigation.	02 Date _____	03 Agency _____	
<b>III. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)</b>			
NUS Corporation, 1986, Final Draft Site Inspection Report and Hazard Ranking System Model Town of Salina files PSI file search			

<b>POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT</b>  <b>PART 11 - ENFORCEMENT INFORMATION</b>		<b>I. IDENTIFICATION</b>	
		01 State  NY	02 Site Number  734036
<b>II. ENFORCEMENT INFORMATION</b>			
01 Past Regulatory/Enforcement Action <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
02 Description of Federal, State, Local Regulatory/Enforcement Action  Several times during the operation of the landfill the Town of Salina was cited for violation of state regulations for landfill management and operations. Specific violations included: on-site burning, dumping into water, leachate observed at site, leaching onto a water course, refuse not confined to a manageable area, unsatisfactory daily cover, refuse protruding through completed areas, improper spreading and compaction of refuse, pooling of water, blowing paper problem, approach road impassable to vehicular traffic during parts of the year.			
<b>III. SOURCES OF INFORMATION</b> (cite specific references, e.g., state files, sample analysis, reports)			
NUS Corporation. 1986. Final Draft Site Inspection Report and Hazard Ranking System Model			

## **APPENDIX B**

### **DATA SUMMARY FORMS AND TENTATIVELY IDENTIFIED COMPOUNDS**

## DATA USABILITY REVIEW

The data usability review for the Salina Town Landfill site consisted of the following:

- Checking chain-of-custody forms and analytical logs to confirm that samples were analyzed for the parameters requested on the chain-of-custody; and
- Reviewing the data to confirm that NYSDEC and laboratory quality control criteria were met.

These quality control criteria included:

- Holding times;
- Laboratory blank contamination;
- Surrogate recoveries;
- Internal standards area and retention times;
- Matrix spike/matrix spike duplicate (MS/MSD) results;
- Instrument calibration (initial and continuing); and
- For metals, the specific criteria were reviewed and problems noted. These criteria included laboratory method blanks, MS/MSDs, instrument calibration, and ICP interference check samples.

Based on the above-described review a memorandum was generated outlining any problems that affected the usability of the data. This memorandum was submitted to NYSDEC under separate cover as part of the reduced data package. The problems commented on generally included blank contamination and holding time violation, and do not constitute a full data validation effort.

For the Salina Town Landfill site, all data were considered usable as qualified by the data review.

Data qualifiers used in the data summary forms are defined below. Table B-1 which follows provides a list of the PAHs analyzed for (as base/neutral extractables) and shows which are considered carcinogenic.

## Defined Qualifiers

- B Analyte is found in the associated blank as well as in the sample.
- J Indicates the value is estimated.
- UJ Indicates the quantitation limits are estimated.
- A Indicates that a TIC is a suspected aldol-condensation product.
- N Indicates presumptive evidence of a compound. Used only for TICs where the identification is based on a mass spectral library search.

Table B-1
POLYNUCLEAR AROMATIC HYDROCARBON (PAH) ANALYSIS LIST
Naphthalene
2-Methylnaphthalene
2-Chloronaphthalene
Acenaphthylene
Acenaphthene
Fluorene
Phenanthrene
Anthracene
Fluoranthene
Pyrene
Benzo(a)anthracene <sup>a</sup>
Chrysene <sup>a</sup>
Benzo(b)fluoranthene <sup>a</sup>
Benzo(k)fluoranthene <sup>a</sup>
Benzo(a)pyrene <sup>a</sup>
Indeno(1,2,3-cd)pyrene <sup>a</sup>
Dibenz(a,h)anthracene <sup>a</sup>
Benzo(g,h,i)perylene

<sup>a</sup> Considered carcinogenic (Department of Health and Human Services, 1993).

**DATA SUMMARY FORM: VOLATILES 1**

Site Name: Salina Town Landfill

**WATER SAMPLES**  
( $\mu\text{g/L}$ )

**To calculate sample quantitation limit:**  
**(CROL \* Dilution Factor)**

Job Number: 9301, <sup>431</sup>453 Sampling Date(s): 7/7/93

[illegible]

**CRQL = Contract Required Quantitation Limit.**



Site Name: Salina Town Landfill

**To calculate sample quantitation limit:  
(CRQL \* Dilution Factor)**

Job Number: 9301.431 Sampling Date(s): 7/7/93

[illegible]

**CRQL = Contract Required Quantitation Limit.**



Site Name: Salina Town Landfill

**To calculate sample quantitation limit:  
(CRQL \* Dilution Factor)**

Job Number: 9301.431 453 Sampling Date(s): 7/7/93

[illegible]

02:Y57900 D4452-TWDS-02/15/94-D1



Site Name: Salina Town Landfill

**To calculate sample quantitation limit:**  
**(CRQL \* Dilution Factor)**

Job Number: 9301 <sup>431</sup><sub>453</sub> Sampling Date(s): 7/7/93

[illegible]

**CRQL = Contract Required Quantitation Limit.**



## DATA SUMMARY FORM: B N A S 2

Site Name: Salina Town Landfill

## WATER SAMPLES

To calculate sample quantitation limit:  
(CRQL \* Dilution Factor)Job Number: 9301.453 Sampling Date(s): 7/7/93

Job Number: 1001733		Sampling Date(s): 11/1							
CRQL	Sample Number:	L-1	L-2	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6
	Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Location:								
Compound									
10	Hexachlorobutadiene								
10	4-Chloro-3-methylphenol								
10	2-Methylnaphthalene								
10	Hexachlorocyclopentadiene								
10	2,4,6-Trichlorophenol								
25	2,4,5-Trichlorophenol								
10	2-Chloronaphthalene								
25	2-Nitroaniline								
10	Dimethylphthalate								
10	Acenaphthylene								
10	2,6-Dinitrotoluene								
25	3-Nitroaniline								
10	Acenaphthene								
25	2,4-Dinitrophenol								
25	4-Nitrophenol								
10	Dibenzofuran								
10	2,4-Dinitrotoluene								
10	Diethylphthalate								
10	4-Chlorophenyl-phenylether								
10	Fluorene								
25	4-Nitroaniline								
25	4,6-Dinitro-2-methylphenol								

CRQL = Contract Required Quantitation Limit.

## DATA SUMMARY FORM: B N A S 3

Site Name: Salina Town LandfillWATER SAMPLES  
(µg/L)To calculate sample quantitation limit:  
(CRQL \* Dilution Factor)Job Number: 9301.453 Sampling Date(s): 7/7/93

CRQL	Compound	Sample Number:		L-1	L-2	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6			
		Dilution Factor:		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0			
		Location:												
10	N-Nitrosodiphenylamine													
10	4-Bromophenyl-phenylether													
10	Hexachlorobenzene													
25	Pentachlorophenol													
10	Phenanthrene													
10	Anthracene													
10	Carbazole													
10	Di-n-butylphthalate													
10	Fluoranthene													
10	Pyrene													
10	Butylbenzylphthalate													
10	3,3'-Dichlorobenzidine													
10	Benzo(a)anthracene													
10	Chrysene													
10	bis(2-Ethylhexyl)phthalate	2	BT	2	BT	2	BT		2	BT	1	BT	2	BT
10	Di-n-octylphthalate													
10	Benzo(b)fluoranthene													
10	Benzo(k)fluoranthene													
10	Benzo(a)pyrene													
10	Indeno(1,2,3-cd)pyrene													
10	Dibenz(a,h)anthracene													
10	Benzo(g,h,i)perylene													

CRQL = Contract Required Quantitation Limit.



Site Name: Salina Town Landfill  
Job Number: 9301.453<sup>431</sup> Sampling Date(s): 7/7/93

**WATER SAMPLES**  
( $\mu\text{g/L}$ )

**To calculate sample quantitation limit:**  
**(CROL \* Dilution Factor)**

[illegible]

CRQL = Contract Required Quantitation Limit.

## DATA SUMMARY FORM: B N A S 2

Site Name: Salina Town LandfillWATER SAMPLES  
(µg/L)To calculate sample quantitation limit:  
(CRQL • Dilution Factor)Job Number: 9301.453 Sampling Date(s): 7/7/93

CRQL	Compound	Sample Number:	SW-7	SW-8	VBLKW1	VBLKW2	VBLKW4	MSB	SW-SMS	SW-SMSA
		Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
		Location:								
10	Hexachlorobutadiene							78	74	74
10	4-Chloro-3-methylphenol									
10	2-Methylnaphthalene									
10	Hexachlorocyclopentadiene									
10	2,4,6-Trichlorophenol									
25	2,4,5-Trichlorophenol									
10	2-Chloronaphthalene									
25	2-Nitroaniline									
10	Dimethylphthalate	4								
10	Acenaphthylene									
10	2,6-Dinitrotoluene									
25	3-Nitroaniline							58	54	58
10	Acenaphthene									
25	2,4-Dinitrophenol							166	168	75
25	4-Nitrophenol									
10	Dibenzofuran							57	57	60
10	2,4-Dinitrotoluene									
10	Diethylphthalate									
10	4-Chlorophenyl-phenylether									
10	Fluorene									
25	4-Nitroaniline									
25	4,6-Dinitro-2-methylphenol									

CRQL = Contract Required Quantitation Limit.

## DATA SUMMARY FORM: B N A S 3

Site Name: Salina Town LandfillWATER SAMPLES  
(µg/L)To calculate sample quantitation limit:  
(CRQL \* Dilution Factor)Job Number: 9301.453 Sampling Date(s): 7/7/93

CRQL	Compound	Sample Number:		Dilution Factor:		Location:											
		SW-7	SW-8	VBLKW1	VBLKW2	VBLKW4	MSB	SW-SMS	SW-SMA								
		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0								
10	N-Nitrosodiphenylamine																
10	4-Bromophenyl-phenylether																
10	Hexachlorobenzene																
25	Pentachlorophenol						70	72	73								
10	Phenanthrene																
10	Anthracene																
10	Carbazole																
10	Di-n-butylphthalate																
10	Fluoranthene																
10	Pyrene						60	47	49								
10	Butylbenzylphthalate																
10	3,3'-Dichlorobenzidine																
10	Benzo(a)anthracene																
10	Chrysene																
10	bis(2-Ethylhexyl)phthalate	2 J		1 J			1 BT		1 BT								
10	Di-n-octylphthalate																
10	Benzo(b)fluoranthene																
10	Benzo(k)fluoranthene																
10	Benzo(a)pyrene																
10	Indeno(1,2,3-cd)pyrene																
10	Dibenz(a,h)anthracene																
10	Benzo(g,h,i)perylene																

CRQL = Contract Required Quantitation Limit.

## DATA SUMMARY FORM: PESTICIDES AND PCBS

Site Name: Salina Town LandfillWATER SAMPLES  
( $\mu\text{g/L}$ )To calculate sample quantitation limit:  
(CRQL \* Dilution Factor)Job Number: 9301.453 Sampling Date(s): 7/7/93

CRQL	Compound	Sample Number:	L-1	L-2	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6
		Dilution Factor:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		Location:								
0.05	alpha-BHC									
0.05	beta-BHC									
0.05	delta-BHC									
0.05	gamma-BHC (Lindane)									
0.05	Heptachlor									
0.05	Aldrin									
0.05	Heptachlor epoxide									
0.05	Endosulfan I									
0.10	Dieldrin									
0.10	4,4'-DDE									
0.10	Endrin									
0.10	Endosulfan II									
0.10	4,4'-DDD									
0.10	Endosulfan sulfate									
0.10	4,4'-DDT									
0.50	Methoxychlor									
0.10	Endrin ketone									
0.10	Endrin aldehyde									
0.05	alpha-Chlordane									
0.05	gamma-Chlordane									
5.0	Toxaphene									

CRQL = Contract Required Quantitation Limit.

Site Name: Salina Town Landfill

(μg/L)

**To calculate sample quantitation limit:**  
**(CRQL \* Dilution Factor)**

Job Number: 9301 <sup>431</sup>/<sub>453</sub> Sampling Date(s): 7/7/93

[illegible]

02:Y57900\_D4452-TWDS-02/15/94-DI

## DATA SUMMARY FORM: PESTICIDES AND PCBS

Site Name: Salina Town LandfillWATER SAMPLES  
(µg/L)To calculate sample quantitation limit:  
(CRQL • Dilution Factor)Job Number: 9301.453 Sampling Date(s): 7/7/93

CRQL	Compound	Sample Number:	SW-8	MSB1	SW-5MS	SW-5MSD	PBLKW1	PBLKWZ		
		Dilution Factor:	1.00	1.00	1.0	1.0	1.0	1.0		
		Location:		Blank spike	Matrix spike	Matrix spike duplicate				
0.05	alpha-BHC									
0.05	beta-BHC									
0.05	delta-BHC									
0.05	gamma-BHC (Lindane)			0.51	0.50	0.48				
0.05	Heptachlor			0.41	0.45	0.44				
0.05	Aldrin			0.34	0.40	0.41				
0.05	Heptachlor epoxide									
0.05	Endosulfan I									
0.10	Dieldrin			1.0	0.98	0.95				
0.10	4,4'-DDE			1.0	1.0	0.95				
0.10	Endrin									
0.10	Endosulfan II									
0.10	4,4'-DDD									
0.10	Endosulfan sulfate									
0.10	4,4'-DDT			1.1	0.99	0.97				
0.50	Methoxychlor									
0.10	Endrin ketone									
0.10	Endrin aldehyde									
0.05	alpha-Chlordane									
0.05	gamma-Chlordane									
5.0	Toxaphene									

CRQL = Contract Required Quantitation Limit.

Site Name: Salina Town Landfill

 $(\mu\text{g/L})$ 

**To calculate sample quantitation limit:**  
**(CRQL ÷ Dilution Factor)**

Job Number: 9301. <sup>431</sup>453 Sampling Date(s): 7/7/93

[illegible]

**CRQL = Contract Required Quantitation Limit.**

## DATA SUMMARY FORM: INORGANICS

Site Name: Salina Town LandfillWATER SAMPLES  
(µg/L)Due to dilution, sample quantitation limit is affected.  
See dilution table for specifics.Job Number: 9301.431 Sampling Date(s): 7/7/93

CRQL	Compound	Sample Number:	L-1	L-2	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6
		Dilution Factor:								
		Location:								
200	Aluminum		5,830	4,030	157	150	179	607	539	95.3
60	Antimony									
10	Arsenic		1.5	3.1	1.6	3.1	2.9	2.7	5.8	4.5
200	Barium		982	697	83.2	87.7	86.5	82.3	101	105
5	Beryllium									
5	Cadmium									
5000	Calcium		232,000	227,000	183,000	166,000	182,000	178,000	124,000	125,000
10	Chromium		203	124					6.3	
50	Cobalt		37.7	19.3						
25	Copper		168	116	2.4	2.1	3.2	8.2		
100	Iron		153,000	72,700	372	456	479	1,660	421	362
3	Lead		71.0	63.9	3.0	2.4	4.7	9.5		
5000	Magnesium		57,000	56,500	30,400	33,500	31,900	31,700	43,100	43,600
15	Manganese		671	485	71.4	92.9	101	182	77.2	41.1
0.2	Mercury		0.32							
40	Nickel		116	53.4						
5000	Potassium		33,100	38,300	5,680	3,630	4,510	5,050	2,760	2,790
5	Selenium									
10	Silver									
5000	Sodium		53,700	56,900	111,000	105,000	111,000	110,000	100,000	105,000
10	Thallium									
50	Vanadium		25.4	16.5						
20	Zinc		284	201	53.6	46.5	37.6	77.1	30.9	16.0
10	Cyanide									

CRQL = Contract Required Quantitation Limit.



## DATA SUMMARY FORM: INORGANICS

Site Name: Salina Town Landfill

## WATER SAMPLES

(µg/L)

Due to dilution, sample quantitation limit is affected.  
See dilution table for specifics.Job Number: 9301.453 Sampling Date(s): 7/7/93

CRQL	Compound	Sample Number:	SW-7	SW-8	SW-SS	SW-SD	LCS												
		Dilution Factor:																	
		Location:			Matrix Spike	Matrix spike duplicate	Laboratory control sample												
200	Aluminum		2,580	205	2,163	133	1,060												
60	Antimony				487		1,020												
10	Arsenic		17.6	20.8	51.8	5.72	50.3												
200	Barium		3,420	99.5	2,003	109	1,050												
5	Beryllium				49.8		1,020												
5	Cadmium		13.0		48.1		1,030												
5000	Calcium		204,000	130,000		122,000	11,300												
10	Chromium		95.6	6.1 B	191	8.15	1,020												
50	Cobalt		55.2		464		1,010												
25	Copper		139	2.8	214	464	997												
100	Iron		244,000	2,500	1,390		1,040												
3	Lead		87.3	1.7	23.4		23.6												
5000	Magnesium		66,000	42,800		42,600	10,500												
15	Manganese		738	71.4	549	76.2	1,020												
0.2	Mercury				1.01														
40	Nickel		96.4		466		1,004												
5000	Potassium		87,600	2,500		2,610	10,030												
5	Selenium				9.76		24.0												
10	Silver				50.8		941												
5000	Sodium		235,000	70,400		99,800	11,670												
10	Thallium				47.3		51.0												
50	Vanadium		25.5		454		970												
20	Zinc		275	104	506	43.0	1,010												
10	Cyanide		28.0		116														

CRQL = Contract Required Quantitation Limit.



Site Name: Salina Town Landfill

To calculate sample quantitation limit:  
 $(\text{CRQL} \times \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

Job Number: 9301.431 Sampling Date(s): 7/7/93

[illegible]

CRQL = Contract Required Quantitation Limit.

## DATA SUMMARY FORM: VOLATILES 1

Site Name: Salina Town Landfill

**SOIL SAMPLES**  
( $\mu\text{g/kg}$ )

To calculate sample quantitation limit:  
 $(\text{CRQL} \times \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

Job Number: 9301.431 453 Sampling Date(s): 7/7/93

[illegible]

CRQL = Contract Required Quantitation Limit.

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Site Name: Salina Town Landfill

**To calculate sample quantitation limit:**  
**(CRQL \* Dilution Factor) / ((100 - % moisture)/100)**

Job Number: 9301.431 453 Sampling Date(s): 7/7/93

CRQL = Contract Required Quantitation Limit.

**DATA SUMMARY FORM: VOLATILES 1**

Site Name: Salina Town Landfill

**SOIL SAMPLES**  
( $\mu\text{g/kg}$ )

To calculate sample quantitation limit:  
 $(CRQL * \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

Job Number: 9301. <sup>431</sup>453 Sampling Date(s): 7/7/93

[illegible]

**CRQL = Contract Required Quantitation Limit.**

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Site Name: Salina Town Landfill

**SOIL SAMPLES**  
( $\mu\text{g/kg}$ )

To calculate sample quantitation limit:  
 $(\text{CRQL} \times \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

Job Number: 9301.431 453 Sampling Date(s): 7/7/93

[illegible]

CRQL = Contract Required Quantitation Limit.

## DATA SUMMARY FORM: B N A S 1

Site Name: Salina Town Landfill

## SOIL SAMPLES

(ug/kg)

Job Number: 9301.451 Sampling Date(s): 7/7/93To calculate sample quantitation limit:  
(CRQL \* Dilution Factor) / ((1 - % moisture)/100)

CRQL	Compound	Sample Number:	SED-1	SED-2	SED-3	SED-4	SED-5	SED-6	SED-7	SED-8
		Dilution Factor:	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0
		% Moisture:	28	49	49	52	51	50	55	73
		Location:								
330	Phenol									
330	bis(2-Chloroethyl)ether									
330	2-Chlorophenol									
330	1,3-Dichlorobenzene									
330	1,4-Dichlorobenzene									
330	1,2-Dichlorobenzene									
330	2-Methylphenol									
330	2,2'-oxybis(1-chloropropane)									
330	4-Methylphenol									
330	N-Nitroso-di-n-propylamine									
330	Hexachloroethane									
330	Nitrobenzene									
330	Isophorone									
330	2-Nitrophenol									
330	2,4-Dimethylphenol									
330	bis(2-Chloroethoxy)methane									
330	2,4-Dichlorophenol									
330	1,2,4-Trichlorobenzene									
330	Naphthalene			180 J						
330	4-Chloroaniline									

CRQL = Contract Required Quantitation Limit.



## DATA SUMMARY FORM: B N A S 2

Site Name: Salina Town Landfill

## SOIL SAMPLES

(µg/kg)

To calculate sample quantitation limit:  
(CRQL \* Dilution Factor) / ((100 - % moisture)/100)Job Number: 9301.431  
453 Sampling Date(s): 7/7/93

CRQL	Compound	Sample Number:	SED-1	SED-2	SED-3	SED-4	SED-5	SED-6	SED-7	SED-8
		Dilution Factor:	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0
		% Moisture:	28	49	49	52	51	50	55	73
		Location:								
330	Hexachlorobutadiene									
330	4-Chloro-3-methylphenol									
330	2-Methylnaphthalene			91 J						
330	Hexachlorocyclopentadiene									
330	2,4,6-Trichlorophenol									
800	2,4,5-Trichlorophenol									
330	2-Chloronaphthalene									
800	2-Nitroaniline									
330	Dimethylphthalate									
330	Acenaphthylene									
330	2,6-Dinitrotoluene									
800	3-Nitroaniline									
330	Acenaphthene		84 J	330 J	75 J	140 J		86 J		
800	2,4-Dinitrophenol									
800	4-Nitrophenol									
330	Dibenzofuran			200 J						
330	2,4-Dinitrotoluene									
330	Diethylphthalate			100 J						
330	4-Chlorophenyl-phenylether									
330	Fluorene		66 J	390 J	77 J	130 J		70 J		
800	4-Nitroaniline									
800	4,6-Dinitro-2-methylphenol									

CRQL = Contract Required Quantitation Limit.

## DATA SUMMARY FORM: B N A S 3

Site Name: Salina Town Landfill

## SOIL SAMPLES

Job Number: 9301-453 Sampling Date(s): 7/7/93

(µg/kg)

To calculate sample quantitation limit:  
(CRQL \* Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:	SED-1	SED-2	SED-3	SED-4	SED-5	SED-6	SED-7	SED-8
		Dilution Factor:	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0
		% Moisture:	28	49	49	52	51	50	55	73
		Location:								
330	N-Nitrosodiphenylamine									
330	4-Bromophenyl-phenylether									
330	Hexachlorobenzene									
800	Pentachlorophenol		110 J							
330	Phenanthrene		600	3,500	920	1,500		640 J	240 J	270 J
330	Anthracene		110 J	440 J	110 J	230 J		120 J		
330	Carbazole		79 J	420 J	130 J	180 J		110 J		
330	Di-n-butylphthalate		120 J		88 J		110 J	120 J	52 BJ	230 BJ
330	Fluoranthene		1,400	5,100	2,000	2,900	150 J	1,600	420 J	450 J
330	Pyrene		1,100	5,900	1,800	2,400	140 J	1,300	610 J	340 J
330	Butylbenzylphthalate									
330	3,3'-Dichlorobenzidine									
330	Benzo(a)anthracene		520	2,400	850	1,300		580 J	210 J	180 J
330	Chrysene		630	2,600	1,100	1,500		760	270 J	190 J
330	bis(2-Ethylhexyl)phthalate		280 BJ	570 BJ	230 BJ	520 BJ	160 BJ	280 BJ	230 BJ	260 BJ
330	Di-n-octylphthalate									
330	Benzo(b)fluoranthene		890	3,600	1,600	1,900	84 J	910	380 J	260 J
330	Benzo(k)fluoranthene		260 J	820 J	420 J	760		380 J	140 J	
330	Benzo(a)pyrene		560	1,900	960	1,600		760	280 J	
330	Indeno(1,2,3-cd)pyrene		530	1,600	830	1,400	77 J	660	260 J	
330	Dibenz(a,h)anthracene		73 J	390 J	160 J	290 J		100 J		
330	Benzo(g,h,i)perylene		480	350 J	940	1,400	78 J	640 J	140 J	

CRQL = Contract Required Quantitation Limit.

## DATA SUMMARY FORM: B N A S 1

Site Name: Salina Town LandfillSOIL SAMPLES  
(µg/kg)To calculate sample quantitation limit:  
(CRQL \* Dilution Factor) / ((1 - % moisture)/100)Job Number: 9301.453 Sampling Date(s): 4/7/93

CRQL	Compound	Sample Number:		SS-1	SS-2	SS-3	SBLKS1	SBLKS2	MSB	SED-5MS	SS-3MS
		Dilution Factor:		2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
		% Moisture:		40	7	6	-	-	-	51	6
		Location:							Spike blank	Matrix Spike	Matrix spike
330	Phenol								990	2,300	
330	bis(2-Chloroethyl)ether										
330	2-Chlorophenol								1,000	2,100	
330	1,3-Dichlorobenzene										
330	1,4-Dichlorobenzene								930	1,700	
330	1,2-Dichlorobenzene										
330	2-Methylphenol										
330	2,2'-oxybis(1-chloropropane)										
330	4-Methylphenol										
330	N-Nitroso-di-n-propylamine								660	1,200	
330	Hexachloroethane										
330	Nitrobenzene										
330	Isophorone										
330	2-Nitrophenol										
330	2,4-Dimethylphenol										
330	bis(2-Chloroethoxy)methane										
330	2,4-Dichlorophenol										
330	1,2,4-Trichlorobenzene								1,100	1,800	
330	Naphthalene			170 J							
330	4-Chloroaniline										

CRQL = Contract Required Quantitation Limit.

## DATA SUMMARY FORM: B N A S 2

Site Name: Salina Town LandfillSOIL SAMPLES  
(µg/kg)To calculate sample quantitation limit:  
(CRQL \* Dilution Factor) / ((100 - % moisture)/100)Job Number: 9301.453 Sampling Date(s): 7/7/93

CRQL	Compound	Sample Number:		SS-1		SS-2		SS-3		SBLKS1		SBLKS2		MSB		SED-SMS		SS-3MS	
		Dilution Factor:		2.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
		% Moisture:		40		7		6		-		-		-		51		6	
		Location:																	
330	Hexachlorobutadiene																		
330	4-Chloro-3-methylphenol													960		1,900			
330	2-Methylnaphthalene			200	J														
330	Hexachlorocyclopentadiene																		
330	2,4,6-Trichlorophenol																		
800	2,4,5-Trichlorophenol																		
330	2-Chloronaphthalene																		
800	2-Nitroaniline																		
330	Dimethylphthalate																		
330	Acenaphthylene			69	J														
330	2,6-Dinitrotoluene																		
800	3-Nitroaniline																		
330	Acenaphthene			220	J	31	J	100	J					1,000		1,900			
800	2,4-Dinitrophenol																		
800	4-Nitrophenol																		
330	Dibenzofuran			170	J			52						1,000		1,100	J		
330	2,4-Dinitrotoluene																		
330	Diethylphthalate													720		1,100			
330	4-Chlorophenyl-phenylether																		
330	Fluorene			300	J	43	J	130	J									61	J
800	4-Nitroaniline																		
800	4,6-Dinitro-2-methylphenol																		

CRQL = Contract Required Quantitation Limit.

## DATA SUMMARY FORM: B N A S 3

Site Name: Salina Town LandfillSOIL SAMPLES  
(µg/kg)Job Number: 9301.453 Sampling Date(s): 7/7/93To calculate sample quantitation limit:  
(CRQL \* Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:	SS-1	SS-2	SS-3	SBLKS1	SBLKS2	MSB	SED-5MS	SS-3MS
		Dilution Factor:	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
		% Moisture:	40	7	6	-	-	-	51	6
		Location:								
330	N-Nitrosodiphenylamine									
330	4-Bromophenyl-phenylether									
330	Hexachlorobenzene									
800	Pentachlorophenol							1,600	1,900	
330	Phenanthrene		4,000	440	750					400
330	Anthracene		380 J	54 J	220 J					90 J
330	Carbazole		620 J	40 J	100 J					42 J
330	Di-n-butylphthalate		200 BT	23 BT	81 BT		31 J			41 BT
330	Fluoranthene		5,500	860	1,200				130 J	750
330	Pyrene		11,000	900	1,600			1,000	1,900	
330	Butylbenzylphthalate									
330	3,3'-Dichlorobenzidine									
330	Benzo(a)anthracene		3,500	390	670					420
330	Chrysene		4,800	440	670					420
330	bis(2-Ethylhexyl)phthalate		630 BT	80 BT	66 BT	47 J	120 J	83 BT	140 BT	54 BT
330	Di-n-octylphthalate									
330	Benzo(b)fluoranthene		6,400	620	780				89 J	560
330	Benzo(k)fluoranthene		1,600	180 J	320 J					220 J
330	Benzo(a)pyrene		4,500	380	390				71 J	440
330	Indeno(1,2,3-cd)pyrene		3,900	330 J	330 J				78 J	300 J
330	Dibenz(a,h)anthracene		740 J	61 J	93 J					65 J
330	Benzo(g,h,i)perylene		3,600	89 J	49 J				80 J	280 J

CRQL = Contract Required Quantitation Limit.

DATA SUMMARY FORM: B N A S 1											
Site Name: <u>Salina Town Landfill</u>		SOIL SAMPLES		To calculate sample quantitation limit: (CRQL * Dilution Factor) / ((1 - % moisture)/100)							
Job Number: <u>9301.453</u>		Sampling Date(s): <u>7/7/93</u>									
CRQL	Compound	Sample Number: Dilution Factor: % Moisture: Location:									
		SED-SMSD									
		1.0									
		51									
		Matrix spike duplicate									
330	Phenol	2,300									
330	bis(2-Chloroethyl)ether										
330	2-Chlorophenol	2,100									
330	1,3-Dichlorobenzene										
330	1,4-Dichlorobenzene	1,800									
330	1,2-Dichlorobenzene										
330	2-Methylphenol										
330	2,2'-oxybis(1-chloropropane)										
330	4-Methylphenol										
330	N-Nitroso-di-n-propylamine	1,200									
330	Hexachloroethane										
330	Nitrobenzene										
330	Isophorone										
330	2-Nitrophenol										
330	2,4-Dimethylphenol										
330	bis(2-Chloroethoxy)methane										
330	2,4-Dichlorophenol										
330	1,2,4-Trichlorobenzene	1,800									
330	Naphthalene										
330	4-Chloroaniline										

CRQL = Contract Required Quantitation Limit.

## DATA SUMMARY FORM: B N A S 2

Site Name: Salina Town Landfill

## SOIL SAMPLES

(µg/kg)

Job Number: 9301.453 <sup>431</sup> Sampling Date(s): 7/7/93To calculate sample quantitation limit:  
(CRQL \* Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:	Dilution Factor:	% Moisture:	Location:														
		SED-SMSD	1.0	51															
330	Hexachlorobutadiene																		
330	4-Chloro-3-methylphenol	1,800																	
330	2-Methylnaphthalene																		
330	Hexachlorocyclopentadiene																		
330	2,4,6-Trichlorophenol																		
800	2,4,5-Trichlorophenol																		
330	2-Chloronaphthalene																		
800	2-Nitroaniline																		
330	Dimethylphthalate																		
330	Acenaphthylene																		
330	2,6-Dinitrotoluene																		
800	3-Nitroaniline																		
330	Acenaphthene	1,800																	
800	2,4-Dinitrophenol																		
800	4-Nitrophenol	1,100 J																	
330	Dibenzofuran																		
330	2,4-Dinitrotoluene	1,100 J																	
330	Diethylphthalate																		
330	4-Chlorophenyl-phenylether																		
330	Fluorene																		
800	4-Nitroaniline																		
800	4,6-Dinitro-2-methylphenol																		

CRQL = Contract Required Quantitation Limit.

## DATA SUMMARY FORM: B N A S 3

Site Name: Salina Town LandfillSOIL SAMPLES  
(ug/kg)Job Number: 9301.453<sup>431</sup> Sampling Date(s): 7/7/93To calculate sample quantitation limit:  
(CRQL \* Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:												
		Dilution Factor:												
		% Moisture:												
		Location:												
		SED-5 MSN												
		1.0												
		51												
330	N-Nitrosodiphenylamine													
330	4-Bromophenyl-phenylether													
330	Hexachlorobenzene													
800	Pentachlorophenol	1,200 J												
330	Phenanthrene													
330	Anthracene													
330	Carbazole													
330	Di-n-butylphthalate													
330	Fluoranthene	120 J												
330	Pyrene	1,800												
330	Butylbenzylphthalate													
330	3,3'-Dichlorobenzidine													
330	Benzo(a)anthracene													
330	Chrysene													
330	bis(2-Ethylhexyl)phthalate	170 B												
330	Di-n-octylphthalate													
330	Benzo(b)fluoranthene	78 J												
330	Benzo(k)fluoranthene													
330	Benzo(a)pyrene													
330	Indeno(1,2,3-cd)pyrene	68 J												
330	Dibenz(a,h)anthracene													
330	Benzo(g,h,i)perylene	75 J												

CRQL = Contract Required Quantitation Limit.



## DATA SUMMARY FORM: PESTICIDES AND PCBs

Site Name: Salina Town LandfillSOIL SAMPLES  
(µg/kg)Job Number: 9301.431  
453 Sampling Date(s): 7/7/93To calculate sample quantitation limit:  
(CRQL \* Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:	SED-1	SED-2	SED-3	SED-4	SED-5	SED-6	SED-7	SED-8
		Dilution Factor:	10.0	5.00	5.00	5.00	1.00	2.00	1.00	1.00
		% Moisture:	26	44	49	53	80	50	55	73
		Location:								
1.7	alpha-BHC									
1.7	beta-BHC									
1.7	delta-BHC									
1.7	gamma-BHC (Lindane)									
1.7	Heptachlor									
1.7	Aldrin									
1.7	Heptachlor epoxide									
1.7	Endosulfan I									
3.3	Dieldrin									
3.3	4,4'-DDE									
3.3	Endrin									
3.3	Endosulfan II									
3.3	4,4'-DDD									
3.3	Endosulfan sulfate									
3.3	4,4'-DDT									
17	Methoxychlor									
3.3	Endrin ketone									
3.3	Endrin aldehyde									
1.7	alpha-Chlordane									
1.7	gamma-Chlordane									
170	Toxaphene									

CRQL = Contract Required Quantitation Limit.

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## DATA SUMMARY FORM: PESTICIDES AND PCBS

Site Name: Salina Town LandfillSOIL SAMPLES  
(µg/kg)To calculate sample quantitation limit:  
(CRQL \* Dilution Factor) / ((100 - % moisture)/100)Job Number: 9301.453 Sampling Date(s): 7/7/93

CRQL	Compound	Sample Number:	SS-1	SS-1 DL	SS-2	SS-3	PBLKS1	PBLKS2	MSB2	SED-5MS
		Dilution Factor:	10.0	100	1.00	1.00	1.00	1.00	1.00	1.00
		% Moisture:	39	39	7	6	-	-	-	80
		Location:								
1.7	alpha-BHC									
1.7	beta-BHC									
1.7	delta-BHC									
1.7	gamma-BHC (Lindane)								18	63 J
1.7	Heptachlor								18	67
1.7	Aldrin								16	67
1.7	Heptachlor epoxide									
1.7	Endosulfan I									
3.3	Dieldrin								33	120
3.3	4,4'-DDE					4.5 J				
3.3	Endrin								32	100 J
3.3	Endosulfan II									
3.3	4,4'-DDD									
3.3	Endosulfan sulfate									
3.3	4,4'-DDT								34	110
17	Methoxychlor									
3.3	Endrin ketone									
3.3	Endrin aldehyde									
1.7	alpha-Chlordane									
1.7	gamma-Chlordane									
170	Toxaphene									

CRQL = Contract Required Quantitation Limit.



### Site Names

## Salina Town Landfill

## (μg/kg)

**Job Number:**

9301. <sup>431</sup><sub>453</sub>

**Sampling Date(s):**

7 | 7 | 93

**To calculate sample quantitation limit:**

$$(\text{CROL} \times \text{Dilution Factor}) / ([100 - \% \text{ moisture}]/100)$$

CRQL	Compound	Sample Number:	Dilution Factor:	% Moisture:	Location:
		SED-5MSM	1.00	80	
1.7	alpha-BHC				
1.7	beta-BHC				
1.7	delta-BHC				
1.7	gamma-BHC (Lindane)	69	I		
1.7	Heptachlor	70			
1.7	Aldrin	69			
1.7	Heptachlor epoxide				
1.7	Endosulfan I				
3.3	Dieldrin	140			
3.3	4,4'-DDE				
3.3	Endrin	100	J		
3.3	Endosulfan II				
3.3	4,4'-DDD				
3.3	Endosulfan sulfate				
3.3	4,4'-DDT	120			
17	Methoxychlor				
3.3	Endrin ketone				
3.3	Endrin aldehyde				
1.7	alpha-Chlordane				
1.7	gamma-Chlordane				
170	Toxaphene				

**CRQL = Contract Required Quantitation Limit.**

**DATA SUMMARY FORM: PESTICIDES AND PCBS (Cont.)**Site Name: Salina Town Landfill

**SOIL SAMPLES**  
( $\mu\text{g/kg}$ )

To calculate sample quantitation limit:  
 $(CRQL \times \text{Dilution Factor}) / ([100 - \% \text{ moisture}]/100)$

Job Number: 9301-453<sup>431</sup> Sampling Date(s): 7/7/93

[illegible]

**CRQL = Contract Required Quantitation Limit.**

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## DATA SUMMARY FORM: INORGANICS

Site Name: Salina Town LandfillSOIL SAMPLES  
(mg/kg)Due to dilution, sample quantitation limit is affected.  
See dilution table for specifics.Job Number: 9301.431 Sampling Date(s): 7/7/93

CRQL	Compound	Sample Number:	SED-1	SED-2	SED-3	SED-4	SED-5	SED-6	SED-7	SED-8
		Dilution Factor:								
		% Solids:	72.4	51.4	51.2	47.5	18.	49.6	45.2	26.6
		Location:								
40	Aluminum		2,790	4,120	6,710	6,060	10,300	6,050	6,160	1,080
12	Antimony						91.5			
2	Arsenic		2.9	5.4	5.2	6.5	40.9	8.9	4.0	117
40	Barium		40.2	54.5	93.4	78.9	198	75.8	347	237
1	Beryllium				0.42					
1	Cadmium				2.2	1.7			7.4	
1000	Calcium		103,000	48,900	59,800	59,700	69,000	52,700	56,200	86,500
2	Chromium		28.3	29.0	44.3	56.6	28.1	34.0	109	
10	Cobalt		4.5	6.2	6.5	6.0	14.6	5.9	17.9	7.9
5	Copper		70.7	56.2	76.6	82.1	47.6	54.3	146	16.9
20	Iron		12,100	11,500	13,000	14,900	34,200	15,800	54,500	24,400
0.6	Lead		83.5	72.1	84.2	81.3	61.8	98.0	151	35.6
1000	Magnesium		12,500	12,400	15,700	15,200	19,100	15,700	20,800	5,360
3	Manganese		223	222	247	274	476	356	363	129
0.2	Mercury									
8	Nickel		16.0	19.6	40.0	27.0	40.9	21.6	51.8	11.8
1000	Potassium		429	813	1,780	1,350	3,070	1,580	1,400	
1	Selenium			0.46						
2	Silver						5.2			
1000	Sodium								741	806
2	Thallium				0.43					
10	Vanadium		9.7	13.7	22.2	20.6	33.7	17.9	22.0	5.5
4	Zinc		133	176	223	246	223	262	304	73.3
2	Cyanide		0.82	1.4			3.4			

CRQL = Contract Required Quantitation Limit.

## DATA SUMMARY FORM: INORGANICS

Site Name: Salina Town LandfillSOIL SAMPLES  
(mg/kg)Due to dilution, sample quantitation limit is affected.  
See dilution table for specifics.Job Number: 9301.453<sup>431</sup> Sampling Date(s): 7/7/93

CRQL	Compound	Sample Number:	SS-1	SS-2	SS-3	SED-SS	SED-SD	LCS				
		Dilution Factor:										
		% Solids:	59.5	93.4	94.2	18.8	18.8					
		Location:				Matrix Spike	Duplicate	Laboratory Control sample				
40	Aluminum		3,200	4,160	1,900		11,300	322				
12	Antimony					495		250				
2	Arsenic		15.4	6.1	3.0	80.3	46.2					
40	Barium		172	68.8	38.6	2,410	237	5.2				
1	Beryllium		0.70	0.36		57.0		19.2				
1	Cadmium		6.9			51.1		40.2				
1000	Calcium		47,400	81,500	67,400		73,000	206,200				
2	Chromium		1,920	14.2	7.0	262	27.2	103				
10	Cobalt		9.8	7.1	5.3	540	13.1	146				
5	Copper		495	18.7	20.4	315	52.0	616.50				
20	Iron		10,400	9,600	5,470		43,000	24,600				
0.6	Lead		330	27.2	25.2	572	74.8	213				
1000	Magnesium		9,160	21,400	12,500		19,800	123,860				
3	Manganese		197	319	262	1,060	510	201				
0.2	Mercury		0.40			2.70		17.0				
8	Nickel		484	12.6	8.6	563	38.1	62.0				
1000	Potassium		338 B	615 B	261 B		2,400	58.3				
1	Selenium		0.82			10.5						
2	Silver		4.0			45.2		17.8				
1000	Sodium		627	255	98.4		390	68.2				
2	Thallium		0.42	0.25		55.0						
10	Vanadium		25.7	20.4	5.9	570	34.1	66.8				
4	Zinc		481	40.5	36.2	850	375	190				
2	Cyanide		2.6	0.70		26.5						

CRQL = Contract Required Quantitation Limit.



VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SED-4

Contract:

SDG No.: SED-1

Name: E & E INC.

SAS No.:

Code: EANDE Case No.: 431

Lab Sample ID: 67031

Matrix: (soil/water) SOIL

Lab File ID: H1555

Sample wt/vol: 5.0 (g/mL) G

Date Received: 07/07/93

Level: (low/med) LOW

Date Analyzed: 07/13/93

Moisture: not dec. 53

Dilution Factor: 1.0

Column: VOCOL ID: 0.530 (mm)

Soil Aliquot Volume: (uL)

Oil Extract Volume: (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

Number TICs found: 2

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALKYLATED BENZENE	23.85	20	J
2.	UNKNOWN HYDROCARBON	24.58	34	J

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VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SED-5

Lab Name: E & E INC.

Contract:

Lab Code: EANDE Case No.: 431

SAS No.:

SDG No.: SED-1

Matrix: (soil/water) SOIL

Lab Sample ID: 67032

Sample wt/vol: 5.4 (g/mL) G

Lab File ID: H1556

Level: (low/med) LOW

Date Received: 07/07/93

Moisture: not dec. 81

Date Analyzed: 07/13/93

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 3

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	22.93	100	J
2.	UNKNOWN HYDROCARBON	23.61	25	J
3.	UNKNOWN	23.66	25	J

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SS-1

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 431

SAS No.:

SDG No.: SED-1

Matrix: (soil/water) SOIL

Lab Sample ID: 67169

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: H1577

Level: (low/med) LOW

Date Received: 07/09/93

Moisture: not dec. 40

Date Analyzed: 07/13/93

Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 1

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.79	9	J

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SEMI-VOLATILE ORGANICS  
TENTATIVELY IDENTIFIED COMPOUNDS

SED-1

Lab Name: E & E INC.

Contract:

Lab Code: EAND E

Case No.: 431

SAS No.:

SDG No.: SED-1

Matrix: (soil/water) SOIL

Lab Sample ID: 67028

Sample wt vol: 30.0 (g/mL) G

Lab File ID: E4070

Level: (low/med) LOW

Date Received: 07/07/93

% Moisture: 28 decanted: (Y/N) N

Date Extracted: 07/12/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 07/21/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

Number TICs found: 20

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.54	2100	J
2.	UNKNOWN	5.46	2200	J
3. 12-14-22	Aldol Condensation Product	5.73	1500	ABJN
4.	UNKNOWN	7.93	250	J
5.	UNKNOWN	8.23	580	J
6.	UNKNOWN	8.64	300	BJ
7.	UNKNOWN	9.80	760	BJ
8.	UNKNOWN HYDROCARBON	11.16	250	J
9.	UNKNOWN	13.07	1900	BJ
10.	UNKNOWN	16.25	1900	BJ
11.	UNKNOWN	19.05	420	J
12.	UNKNOWN	20.24	210	J
13.	UNKNOWN	22.60	300	J
14.	UNKNOWN	25.72	650	J
15.	UNKNOWN OXY. PAH	26.32	210	J
16.	UNKNOWN	30.61	440	J
17.	UNKNOWN	33.35	350	J
18.	UNKNOWN	34.61	420	J
19.	UNKNOWN	37.49	350	J
20.	UNKNOWN HYDROCARBON	37.85	390	J

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED-2

Lab Name: E & E INC.

Contract:

Lab Code: EAND E

Case No.: 431

SAS No.:

SDG No.: SED-1

Matrix: (soil/water) SOIL

Lab Sample ID: 67030

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: E4198

Level: (low/med) LOW

Date Received: 07/07/93

Moisture: 49 decanted: (Y/N) N

Date Extracted: 07/12/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 07/29/93

Injection Volume: 2.0(uL)

Dilution Factor: 2.0

GC Cleanup: (Y/N) Y

pH: 7.7

Number TICs found: 20

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.60	4200	J
2.	UNKNOWN	5.45	4600	J
3. 12-34-22	Aldol Condensation Product	5.70	2300	ABJN
4.	UNKNOWN	6.01	590	J
5.	UNKNOWN	7.83	490	J
6.	UNKNOWN	10.97	780	J
7.	METHY 9H-FLUORENE ISOMER & U	22.44	550	J
8. 13-26-50	Dibenzothiophene	23.13	390	JN
9.	UNKNOWN PAH	25.16	460	J
10.	UNKNOWN PAH	25.32	850	J
11.	UNKNOWN OXY. PAH	26.07	810	J
12.	UNKNOWN PAH	26.83	360	J
13.	UNKNOWN PAH	28.95	650	J
14.	UNKNOWN PAH	29.16	420	J
15.	UNKNOWN PAH	30.92	490	J
16.	UNKNOWN	31.05	420	J
17.	UNKNOWN PAH	35.36	1500	J
18.	UNKNOWN HYDROCARBON	35.89	1300	J
19.	UNKNOWN HYDROCARBON	37.61	980	J
20.	UNKNOWN	40.96	1100	J

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SED-3

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 431

SAS No.:

SDG No.: SED-1

Matrix: (soil/water) SOIL

Lab Sample ID: 67029

Sample wt vol: 30.0 (g/mL) G

Lab File ID: E4098

Level: (low/mod) LOW

Date Received: 07/07/93

% Moisture: 19 decanted: (Y/N) N

Date Extracted: 07/12/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 07/22/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.7

Number TICs found: 20

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.77	3100	J
2.	UNKNOWN	5.62	3300	J
3. 12-34-12	Aldol Condensation Product	5.85	910	ABJN
4.	UNKNOWN	8.24	720	J
5.	UNKNOWN	8.65	420	BJ
6.	UNKNOWN	9.78	1100	BJ
7.	UNKNOWN HYDROCARBON	11.13	750	J
8.	UNKNOWN	13.01	2800	BJ
9.	UNKNOWN	16.19	2700	BJ
10.	UNKNOWN HYDROCARBON	22.58	590	J
11.	UNKNOWN	25.65	620	J
12.	UNKNOWN	29.04	720	J
13.	UNKNOWN	30.53	490	J
14.	UNKNOWN	33.28	460	J
15.	UNKNOWN HYDROCARBON	34.22	1100	J
16.	UNKNOWN OXY. HYDROCARBON	35.50	850	J
17.	UNKNOWN HYDROCARBON	36.07	2600	J
18.	UNKNOWN	36.18	1600	J
19.	UNKNOWN HYDROCARBON	37.77	680	J
20.	UNKNOWN	37.99	680	J

## TENTATIVELY IDENTIFIED COMPOUNDS

SED-4

Lab Name: E &amp; E INC.

Contract:

Lab Code: EANDE

Case No.: 431

SAS No.:

SDG No.: SED-1

Matrix: (soil/water) SOIL

Lab Sample ID: 67031

Sample wt vol: 30.0 (g/mL) G

Lab File ID: E4058

Level: (low/med) LOW

Date Received: 07/07/93

Moisture: 52 decanted: (Y/N) N

Date Extracted: 07/12/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 07/20/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y

pH: 7.5

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

Number TICs found: 20

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.53	1800	J
2.	UNKNOWN	5.44	1700	J
3. 12-34-22	Aldol Condensation Product	5.71	620	ABJN
4.	UNKNOWN	8.66	590	BJ
5.	UNKNOWN	9.75	450	J
6.	UNKNOWN	9.80	800	BJ
7.	UNKNOWN	13.07	1300	BJ
8.	UNKNOWN	16.24	1300	BJ
9.	UNKNOWN HYDROCARBON	18.96	240	J
10.	UNKNOWN HYDROCARBON	21.18	240	J
11.	UNKNOWN HYDROCARBON	22.67	1000	J
12.	UNKNOWN PAH	25.41	350	J
13.	UNKNOWN PAH	25.60	450	J
14.	UNKNOWN	25.73	410	J
15.	UNKNOWN OXY. PAH	26.33	480	J
16.	UNKNOWN HYDROCARBON	34.32	830	J
17.	UNKNOWN PAH	35.68	760	J
18.	UNKNOWN HYDROCARBON	36.15	1100	J
19.	UNKNOWN OXY. HYDROCARBON	37.37	760	J
20.	UNKNOWN HYDROCARBON	37.86	930	J

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## TENTATIVELY IDENTIFIED COMPOUNDS

SED-5

Lab Name: E &amp; E INC.

Contract:

Lab Code: EANDE

Case No.: 431

SAS No.:

SDG No.: SED-1

Matrix: (soil,water) SOIL

Lab Sample ID: 67032

Sample wt vol: 30.0 (g/mL) G

Lab File ID: E4059

Level: (low,med) LOW

Date Received: 07/07/93

% Moisture: 51 decanted: (Y/N) N

Date Extracted: 07/12/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 07/20/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y

pH: 7.8

## CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Number TICs found: 20

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.62	4400	J
2.	UNKNOWN	5.52	4400	J
3. 12-14-22	Aldol Condensation Product	5.75	810	ABJN
4.	UNKNOWN	7.95	340	J
5.	UNKNOWN HYDROCARBON	8.24	370	J
6.	UNKNOWN	8.67	710	BJ
7.	UNKNOWN	9.83	1300	BJ
8.	UNKNOWN HYDROCARBON	11.18	340	J
9.	UNKNOWN	13.08	2500	BJ
10.	UNKNOWN	16.26	2500	BJ
11.	UNKNOWN	19.08	1100	J
12.	UNKNOWN	22.59	240	J
13.	UNKNOWN	23.81	170	J
14.	UNKNOWN	24.73	170	J
15.	UNKNOWN	25.73	750	J
16. 10-54-4500	Molecular Sulfur	27.33	200	JN
17.	UNKNOWN	30.62	750	J
18.	UNKNOWN	33.37	610	J
19.	UNKNOWN	34.61	640	J
20.	UNKNOWN	35.78	580	J

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SED-6

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 431

SAS No.:

SDG No.: SED-1

Matrix: (soil/water) SOIL

Lab Sample ID: 67033

Sample wt vol: 30.0 (g/mL) G

Lab File ID: E4062

Level: (low/med) LOW

Date Received: 07/07/93

Moisture: 50 decanted: (Y/N) N

Date Extracted: 07/12/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 07/20/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

SPC Cleanup: (Y/N) Y

pH: 7.7

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

Number TICs found: 20

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.60	3300	J
2.	UNKNOWN	5.51	3700	J
3. 12-14-12	Aldol Condensation Product	5.78	1500	ABJN
4.	UNKNOWN	8.69	1800	BJ
5.	UNKNOWN	9.86	3100	BJ
6.	UNKNOWN	11.19	930	J
7.	UNKNOWN	13.08	2600	J
8.	UNKNOWN	16.26	2700	BJ
9.	UNKNOWN	19.06	730	J
10.	UNKNOWN HYDROCARBON	19.61	230	J
11.	UNKNOWN	20.25	270	J
12.	UNKNOWN HYDROCARBON	21.18	330	J
13.	UNKNOWN	22.60	270	J
14.	UNKNOWN HYDROCARBON	22.65	760	J
15.	UNKNOWN HYDROCARBON & UNKNOW	25.41	300	J
16.	UNKNOWN	25.73	660	J
17.	UNKNOWN	26.66	270	J
18.	UNKNOWN	30.62	530	J
19.	UNKNOWN	33.35	430	J
20.	UNKNOWN HYDROCARBON	34.30	660	J

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## TENTATIVELY IDENTIFIED COMPOUNDS

SED-7

Lab Name: E &amp; E INC.

Contract:

Lab Code: EANDE

Case No.: 431

SAS No.:

SDG No.: SED-1

Matrix: (soil/water) SOIL

Lab Sample ID: 67167

Sample wt vol: 30.0 (g/mL) G

Lab File ID: E4157

Level: (low med) LOW

Date Received: 07/09/93

% Moisture: 55 decanted: (Y/N) N

Date Extracted: 07/14/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 07/27/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y

pH: 7.2

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

Number TICs found: 21

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.10	1500	J
2. 12-14-02	Aldol Condensation Product	6.09	28000	ABJN
3.	UNKNOWN	7.74	1500	BJ
4.	UNKNOWN	12.91	2900	BJ
5.	UNKNOWN	13.87	220	J
6.	UNKNOWN	14.43	220	J
7.	UNKNOWN	16.07	3400	BJ
8.	UNKNOWN	17.44	550	J
9.	UNKNOWN	18.86	440	J
10.	UNKNOWN	20.08	630	J
11.	UNKNOWN	22.42	1000	J
12.	UNKNOWN	24.54	550	J
13.	UNKNOWN	25.53	660	J
14.	UNKNOWN	26.47	370	J
15.	UNKNOWN	27.31	480	J
16.	UNKNOWN	28.25	480	J
17.	UNKNOWN	28.93	1000	J
18.	UNKNOWN	30.43	630	J
19.	UNKNOWN	31.83	630	J
20.	UNKNOWN	33.17	550	J
21.	UNKNOWN	34.42	850	J

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SEMIVOLATILE ORGANICS ANALYSIS  
TENTATIVELY IDENTIFIED COMPOUNDS

SED-8

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 431

SAS No.:

SDG No.: SED-1

Matrix: (soil/water) SOIL

Lab Sample ID: 67168

Sample wt. vol: 30.0 (g/mL) G

Lab File ID: E4158

Level: (low/mod) LOW

Date Received: 07/09/93

Moisture: 73 decanted: (Y/N) N

Date Extracted: 07/14/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 07/27/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

PC Cleanup: (Y/N) Y

pH: 7.8

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

Number TICs found: 20

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.20	1200	J
2.	UNKNOWN	5.58	7400	J
3. 12-14-12	Aldol Condensation Product	5.81	180000	ABJN
4.	UNKNOWN	7.84	4300	J
5.	UNKNOWN	7.95	430	J
6.	UNKNOWN	12.92	6800	J
7.	UNKNOWN	13.89	550	J
8.	UNKNOWN	16.08	5800	J
9.	UNKNOWN	18.88	1700	J
10.	UNKNOWN	25.53	1000	J
11.	UNKNOWN ACID	25.98	920	J
12.	UNKNOWN	27.31	610	J
13.	UNKNOWN ACID	28.44	1000	J
14.	UNKNOWN	28.93	1500	J
15.	UNKNOWN	30.42	1200	J
16.	UNKNOWN	31.83	1000	J
17.	UNKNOWN	33.16	1200	J
18.	UNKNOWN	34.41	1800	J
19.	UNKNOWN OXY. HYDROCARBON	35.38	1700	J
20.	UNKNOWN HYDROCARBON	36.13	4300	J

FORM I SV-TIC

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IF  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SS-1

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 431

SAS No.:

SDG No.: SED-1

Matrix: (soil/water) SOIL

Lab Sample ID: 67169

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: E4159

Level: (low/med) LOW

Date Received: 07/09/93

Moisture: 40 decanted: (Y/N) N

Date Extracted: 07/14/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 07/27/93

Injection Volume: 2.0(uL)

Dilution Factor: 2.0

PC Cleanup: (Y/N) Y

pH: 8.0

Number TICs found: 20

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.16	2100	J
2. 12-34-22	Aldol Condensation Product	6.00	42000	ABJN
3.	UNKNOWN	7.70	720	BJ
4.	UNKNOWN	12.91	2200	BJ
5.	UNKNOWN	16.07	2100	BJ
6.	TRICHLOROBIPHENYL ISOMER	24.05	1100	J
7.	TRICHLOROBIPHENYL ISOMER	24.58	1500	J
8.	TRICHLOROBIPHENYL ISOMER	24.83	3300	J
9.	TETRACHLOROBIPHENYL ISOMER	25.01	860	J
10.	UNKNOWN PAH	25.21	770	J
11.	TETRACHLOROBIPHENYL ISOMER	25.73	3600	J
12.	TETRACHLOROBIPHENYL ISOMER	25.81	2200	J
13.	TETRACHLOROBIPHENYL ISOMER	26.19	4400	J
14.	TETRACHLOROBIPHENYL ISOMER	26.44	1100	J
15.	TETRACHLOROBIPHENYL ISOMER	26.49	1400	J
16.	TETRACHLOROBIPHENYL ISOMER	27.11	940	J
17.	TETRACHLOROBIPHENYL ISOMER	27.66	1400	J
18.	PENTACHLOROBIPHENYL ISOMER	28.32	720	J
19.	PENTACHLOROBIPHENYL ISOMER	29.36	750	J
20.	UNKNOWN PAH	35.42	860	J

SEMIVOLATILE ORGANICS ANALYSIS  
TENTATIVELY IDENTIFIED COMPOUNDS

SS-2

Contract:

SDG No.: SED-1

Lab Name: E & E INC.

Lab Code: EANDE Case No.: 431

SAS No.:

Lab Sample ID: 67170

Matrix: (soil/water) SOIL

Lab File ID: E4207

Sample wt vol: 30.0 (g/mL) G

Date Received: 07/09/93

Level: (low/med) LOW

Date Extracted: 07/14/93

Moisture: 7 decanted: (Y/N) N

Date Analyzed: 07/29/93

Concentrated Extract Volume: 500.0 (uL)

Dilution Factor: 1.0

Injection Volume: 2.0(uL)

PC Cleanup: (Y/N) Y pH: 8.7

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

Number TICs found: 20

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.65	610	J
2.	UNKNOWN	12.84	1400	J
3.	UNKNOWN	16.00	1800	J
4.	UNKNOWN	18.79	200	J
5.	UNKNOWN	20.00	290	J
6.	UNKNOWN	22.34	340	J
7.	UNKNOWN	24.46	230	J
8.	UNKNOWN	25.47	410	J
9.	UNKNOWN	26.40	200	J
10.	UNKNOWN	27.24	290	J
11.	UNKNOWN	28.84	500	J
12.	UNKNOWN	30.34	290	J
13.	UNKNOWN	30.86	250	J
14.	UNKNOWN	31.75	230	J
15.	UNKNOWN	33.08	340	J
16.	UNKNOWN HYDROCARBON	34.02	250	J
17.	UNKNOWN	34.33	360	J
18.	UNKNOWN HYDROCARBON	34.95	210	J
19.	UNKNOWN PAH	35.30	370	J
20.	UNKNOWN HYDROCARBON	36.71	230	J

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SS-3

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 431

SAS No.:

SDG No.: SED-1

Matrix: (soil/water) SOIL

Lab Sample ID: 67171

Sample wt vol: 30.0 (g/mL) G

Lab File ID: E4161

Level: (low-med) LOW

Date Received: 07/09/93

% Moisture: 6 decanted: (Y/N) N

Date Extracted: 07/14/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 07/27/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

Number TICs found: 20

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 12-14-22	Aldol Condensation Product	6.21	30000	ABJN
2.	UNKNOWN	7.76	780	BJ
3.	UNKNOWN	12.93	1700	J
4.	UNKNOWN	16.09	1600	J
5.	UNKNOWN	18.89	490	J
6.	UNKNOWN	22.43	250	J
7.	UNKNOWN	24.55	160	J
8.	UNKNOWN PAH	25.20	140	J
9.	UNKNOWN PAH	25.38	250	J
10.	UNKNOWN	25.54	370	J
11.	UNKNOWN	27.33	180	J
12.	UNKNOWN	28.95	390	J
13.	UNKNOWN PAH	29.01	160	J
14.	UNKNOWN PAH	29.23	180	J
15.	UNKNOWN	33.18	250	J
16.	UNKNOWN	34.42	410	J
17.	UNKNOWN OXY. HYDROCARBON	35.38	740	J
18.	UNKNOWN HYDROCARBON	35.95	390	J
19.	UNKNOWN OXY. HYDROCARBON	36.14	940	J
20.	UNKNOWN HYDROCARBON	37.67	570	J

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SBLKS1

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 431

SAS No.:

SDG No.: SED-1

Matrix: (Soil/water) SOIL

Lab Sample ID: SBLKS\_07-12

Sample wt vol: 30.0 (g/mL) G

Lab File ID: E4039

Level: (low/med) LOW

Date Received:

Moisture: decanted: (Y/N) N

Date Extracted: 07/12/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 07/19/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

PC Cleanup: (Y/N) Y pH:

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

Number TICs found: 8

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	5.55	83	J
2. 12-14-12	Aldol Condensation Product	5.75	850	AJN
3.	UNKNOWN HYDROCARBON	6.16	83	J
4.	UNKNOWN	8.66	550	J
5.	UNKNOWN	9.76	150	J
6.	UNKNOWN	13.06	300	J
7.	UNKNOWN	16.23	120	J
8.	UNKNOWN	22.84	130	J

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SBLKS2

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 431

SAS No.:

SDG No.: SED-1

Matrix: (soil/water) SOIL

Lab Sample ID: SBLKS\_07-14

Sample wt vol: 30.0 (g/mL) G

Lab File ID: E4155

Level: (low/med) LOW

Date Received:

% Moisture: decanted: (Y/N) N

Date Extracted: 07/14/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 07/27/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

Number TIC's found: 8

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.43	2300	J
2. 12-14-22	Aldol Condensation Product	6.19	30000	AJN
3.	UNKNOWN	7.74	800	J
4.	UNKNOWN	12.90	420	J
5.	UNKNOWN	16.06	250	J
6.	UNKNOWN	21.41	66	J
7.	UNKNOWN	34.79	100	J
8.	UNKNOWN	40.21	120	J

FORM I SV-TIC

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798



Site Name: Salina Town Landfill

Job Number: 9302.780 Sampling Date(s): 11/30/93

**To calculate sample quantitation limit:**  
**(CROL \* Dilution Factor)**

[illegible]

02:Y57900\_D4452-TWDS-02/15/94-DI

**DATA SUMMARY FORM: VOLATILES 2**

Site Name: Salina Town Landfill

## WATER SAMPLES

(μg/L)

Job Number: 9302.780 Sampling Date(s): 11/30/93

**To calculate sample quantitation limit:**  
**(CRQL \* Dilution Factor)**

[illegible]

**CRQL = Contract Required Quantitation Limit.**

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Site Name: Salina Town Landfill

**To calculate sample quantitation limit:**  
**(CRQL ÷ Dilution Factor)**

Job Number: 9302.780 Sampling Date(s): 11/30/93

[illegible]

02:YS7900\_D4452-TWDS-02/15/94-D1

Site Name: Salina Town Landfill

(μg/L)

Job Number: 9302.780 Sampling Date(s): 11/30/93

**CRQL = Contract Required Quantitation Limit.**

## DATA SUMMARY FORM: VOLATILES 2

Site Name: Salina Town Landfill

**SOIL SAMPLES**  
( $\mu\text{g/kg}$ )

To calculate sample quantitation limit:  
 $(\text{CRQL} \times \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

Job Number: 9302.780 Sampling Date(s): 11/30/93

[illegible]

CRQL = Contract Required Quantitation Limit.

Site Name: Salina Landfill

To calculate sample quantitation limit:  
 $(\text{CRQL} \cdot \text{Dilution Factor}) / ([100 - \% \text{ moisture}]/100)$

Job Number: 9302.780 Sampling Date(s): 11/30/93

[illegible]

CRQL = Contract Required Quantitation Limit.

Site Name: Salina Town Landfill

Job Number: 9302.780 Sampling Date(s): 11/30/93

To calculate sample quantitation limit:  
 $(\text{CRQL} \times \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

[illegible]

CRQL = Contract Required Quantitation Limit.

## DATA SUMMARY FORM: VOLATILES 2

Site Name: Salina Town Landfill

**SOIL SAMPLES**  
( $\mu\text{g/kg}$ )

Job Number: 9302.780 Sampling Date(s): 11/30/93

To calculate sample quantitation limit:  
 $(\text{CRQL} \times \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

[illegible]

**CRQL = Contract Required Quantitation Limit.**

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## DATA SUMMARY FORM: B N A S 1

Site Name: Salina Town Landfill

## SOIL SAMPLES

Job Number: 9302, 780 Sampling Date(s): 11/30/93

(µg/kg)

To calculate sample quantitation limit:  
(CRQL \* Dilution Factor) / ((1 - % moisture)/100)

CRQL	Compound	Sample Number:	SS-5	SBLK51	MSB1															
		Dilution Factor:	5.0	1.0	1.0															
		% Moisture:	10	-	-															
		Location:			Matrix spike blank															
330	Phenol		UT		1,000															
330	bis(2-Chloroethyl)ether																			
330	2-Chlorophenol				1,000															
330	1,3-Dichlorobenzene																			
330	1,4-Dichlorobenzene				720															
330	1,2-Dichlorobenzene																			
330	2-Methylphenol																			
330	2,2'-oxybis(1-chloropropane)																			
330	4-Methylphenol																			
330	N-Nitroso-di-n-propylamine				790															
330	Hexachloroethane																			
330	Nitrobenzene																			
330	Isophorone																			
330	2-Nitrophenol																			
330	2,4-Dimethylphenol																			
330	bis(2-Chloroethoxy)methane																			
330	2,4-Dichlorophenol																			
330	1,2,4-Trichlorobenzene				800															
330	Naphthalene																			
330	4-Chloroaniline																			

CRQL = Contract Required Quantitation Limit.

## DATA SUMMARY FORM: B N A S 2

Site Name: Salina Town LandfillSOIL SAMPLES  
(µg/kg)Job Number: 9302.780 Sampling Date(s): 11/30/93To calculate sample quantitation limit:  
(CRQL • Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:	SS-5	SBLK51	MSB														
		Dilution Factor:	1.0	1.0	1.0														
		% Moisture:	10	-	-														
		Location:																	
330	Hexachlorobutadiene		UJ																
330	4-Chloro-3-methylphenol				4,000														
330	2-Methylnaphthalene																		
330	Hexachlorocyclopentadiene																		
330	2,4,6-Trichlorophenol																		
800	2,4,5-Trichlorophenol																		
330	2-Chloronaphthalene																		
800	2-Nitroaniline																		
330	Dimethylphthalate																		
330	Acenaphthylene																		
330	2,6-Dinitrotoluene																		
800	3-Nitroaniline																		
330	Acenaphthene				850														
800	2,4-Dinitrophenol																		
800	4-Nitrophenol				1,200														
330	Dibenzofuran																		
330	2,4-Dinitrotoluene				760														
330	Diethylphthalate																		
330	4-Chlorophenyl-phenylether																		
330	Fluorene																		
800	4-Nitroaniline																		
800	4,6-Dinitro-2-methylphenol		▼																

CRQL = Contract Required Quantitation Limit.

## DATA SUMMARY FORM: B N A S 3

Site Name: Salina Town LandfillSOIL SAMPLES  
(µg/kg)Job Number: 9302,780 Sampling Date(s): 11/30/93To calculate sample quantitation limit:  
(CRQL \* Dilution Factor) / ((100 - % moisture)/100)

CRQL	Sample Number:	SS-5	VBLKSI	MSB															
	Dilution Factor:	1.0	1.0	1.0															
	% Moisture:	10	-	-															
	Location:																		
Compound																			
330	N-Nitrosodiphenylamine		UJ																
330	4-Bromophenyl-phenylether		UJ																
330	Hexachlorobenzene		UJ																
800	Pentachlorophenol		UJ																
330	Phenanthrene	110	J																
330	Anthracene		UJ																
330	Carbazole		UJ																
330	Di-n-butylphthalate		UJ																
330	Fluoranthene	180	J																
330	Pyrene	180	J																
330	Butylbenzylphthalate		UJ																
330	3,3'-Dichlorobenzidine		UJ																
330	Benzo(a)anthracene	100	J																
330	Chrysene	150	J																
330	bis(2-Ethylhexyl)phthalate	180	B	70															
330	Di-n-octylphthalate		UJ																
330	Benzo(b)fluoranthene	190	J																
330	Benzo(k)fluoranthene	68	J																
330	Benzo(a)pyrene	120	J																
330	Indeno(1,2,3-cd)pyrene	130	J																
330	Dibenz(a,h)anthracene		UJ																
330	Benzo(g,h,i)perylene	120	J																

CRQL = Contract Required Quantitation Limit.

## DATA SUMMARY FORM: PESTICIDES AND PCBS

Site Name: Salina Town LandfillWATER SAMPLES  
(µg/L)Job Number: 9302.780 Sampling Date(s): 11/30/93To calculate sample quantitation limit:  
(CRQL \* Dilution Factor)

CRQL	Compound	Sample Number:		SW-11		SW-12		PBLKSI		SW-12MS		SW-12MSD		MSBI	
		Dilution Factor:		1.0		1.0		1.0		1.0		1.0		1.0	
		Location:								Matrix spike		Matrix spike duplicate		Matrix spike blank	
0.05	alpha-BHC				UJ		UJ								
0.05	beta-BHC														
0.05	delta-BHC														
0.05	gamma-BHC (Lindane)									0.36	0.34	0.37			
0.05	Heptachlor									0.36	0.35	0.35			
0.05	Aldrin									0.34	0.33	0.33			
0.05	Heptachlor epoxide														
0.05	Endosulfan I														
0.10	Dieldrin									0.71	0.67	0.76			
0.10	4,4'-DDE														
0.10	Endrin									0.70	0.65	0.83			
0.10	Endosulfan II														
0.10	4,4'-DDD														
0.10	Endosulfan sulfate														
0.10	4,4'-DDT									0.77	0.77	1.8			
0.50	Methoxychlor														
0.10	Endrin ketone														
0.10	Endrin aldehyde														
0.05	alpha-Chlordane														
0.05	gamma-Chlordane														
5.0	Toxaphene				↓		↓								

CRQL = Contract Required Quantitation Limit.

Site Name: Salina Town Landfill

**To calculate sample quantitation limit:**  
**(CRQL \* Dilution Factor)**

Job Number: 9302.780 Sampling Date(s): 11/30/93

[illegible]

02:YS7900\_D4452-TWDS-02/15/94-D1

## DATA SUMMARY FORM: PESTICIDES AND PCBS

Site Name: Salina Town LandfillSOIL SAMPLES  
(µg/kg)To calculate sample quantitation limit:  
(CRQL \* Dilution Factor) / ((100 - % moisture)/100)Job Number: 9302.780 Sampling Date(s): 11/30/93

CRQL	Compound	Sample Number:	SED-11	SED-12	SED-12DL	SS-4	SS-5	PBLKSI	SED-12MS	SED-12MSI
		Dilution Factor:	1.0	2.0	20	1.0	1.0	1.0	1.0	1.0
		% Moisture:	77	69	69	54	10	—	69	69
		Location:								
1.7	alpha-BHC									
1.7	beta-BHC									
1.7	delta-BHC									
1.7	gamma-BHC (Lindane)								41	35
1.7	Heptachlor									
1.7	Aldrin									
1.7	Heptachlor epoxide									
1.7	Endosulfan I									
3.3	Dieldrin						4.7 J			
3.3	4,4'-DDE									
3.3	Endrin								160	150
3.3	Endosulfan II								34 J	31 J
3.3	4,4'-DDD			26 J					48	52
3.3	Endosulfan sulfate									
3.3	4,4'-DDT			40 J			28		180	160
17	Methoxychlor									
3.3	Endrin ketone									
3.3	Endrin aldehyde									
1.7	alpha-Chlordane									
1.7	gamma-Chlordane									
170	Toxaphene									

CRQL = Contract Required Quantitation Limit.

Site Name: Salina Town Landfill

(μg/kg)

Job Number: 9302.780 Sampling Date(s): 11/30/93

**To calculate sample quantitation limit:**  
**(CRQL \* Dilution Factor) / ((100 - % moisture)/100)**

**CRQL = Contract Required Quantitation Limit.**

## DATA SUMMARY FORM: PESTICIDES AND PCBS

Site Name: Salina Town LandfillSOIL SAMPLES  
( $\mu\text{g/kg}$ )Job Number: 9302.780 Sampling Date(s): 11/30/93To calculate sample quantitation limit:  
(CRQL \* Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Sample Number:														
		Dilution Factor:														
		% Moisture:														
		Location:														
		MSB2														
		1.0														
		-														
		Matrix spike blank														
1.7	alpha-BHC															
1.7	beta-BHC															
1.7	delta-BHC															
1.7	gamma-BHC (Lindane)	16														
1.7	Heptachlor	16														
1.7	Aldrin	16														
1.7	Heptachlor epoxide															
1.7	Endosulfan I															
3.3	Dieldrin	32														
3.3	4,4'-DDE															
3.3	Endrin	32														
3.3	Endosulfan II															
3.3	4,4'-DDD															
3.3	Endosulfan sulfate															
3.3	4,4'-DDT	33														
17	Methoxychlor															
3.3	Endrin ketone															
3.3	Endrin aldehyde															
1.7	alpha-Chlordane															
1.7	gamma-Chlordane															
170	Toxaphene															

CRQL = Contract Required Quantitation Limit.



Site Name: Salina Town Landfill

**SOIL SAMPLES**  
( $\mu\text{g/kg}$ )

Job Number: 9302.780 Sampling Date(s): 11/30/93

To calculate sample quantitation limit:  
 $(\text{CRQL} \times \text{Dilution Factor}) / ((100 - \% \text{ moisture})/100)$

[illegible]

**CRQL = Contract Required Quantitation Limit.**

DATA SUMMARY FORM: INORGANICS														
Site Name: <u>Salina Town Landfill</u>		SOIL SAMPLES												
Job Number: <u>9302.780</u>		Sampling Date(s): <u>11/30/93</u>		(mg/kg)		Due to dilution, sample quantitation limit is affected. See dilution table for specifics.								
CRQL	Compound	Sample Number:	Dilution Factor:	% Solids:	Location:									
		55-5	1.0	89.7										
40	Aluminum	3,410												
12	Antimony													
2	Arsenic	3.2												
40	Barium	66.2												
1	Beryllium	0.23												
1	Cadmium													
1000	Calcium	211,000												
2	Chromium	13.9												
10	Cobalt	5.0												
5	Copper	21.2												
20	Iron	8,940												
0.6	Lead	26.3												
1000	Magnesium	22,800												
3	Manganese	254												
0.2	Mercury													
8	Nickel	12.7												
1000	Potassium													
1	Selenium	0.35												
2	Silver													
1000	Sodium													
2	Thallium													
10	Vanadium	13.3												
4	Zinc	62.9												
2	Cyanide													

CRQL = Contract Required Quantitation Limit.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SED-11

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 780

SAS No.:

SDG No.: SS-5

Matrix: (soil/water) SOIL

Lab Sample ID: 76353

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: D9860

Level: (low/med) LOW

Date Received: 12/01/93

% Moisture: not dec. 77

Date Analyzed: 12/06/93

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 1

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	BUTYLBENZENE ISOMER	23.23	95	J

FORM I VOA-TIC

3/90

B-81

48

Lab Name: E & E INC.

Contract:

SED-12

Lab Code: EANDE

Case No.: 780

SAS No.:

SDG No.: SS-5

Matrix: (soil/water) SOIL

Lab Sample ID: 76354

Sample wt/vol: 5.1 (g/mL) G

Lab File ID: D9861

Level: (low/med) LOW

Date Received: 12/01/93

% Moisture: not dec. 69

Date Analyzed: 12/06/93

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 1

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 11-05-43	Hexane	5.14	19	JN

**SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET**  
**TENTATIVELY IDENTIFIED COMPOUNDS**

**SS-5**

Lab Name: E & E INC.

Contract:

Lab Code: EANDE

Case No.: 780

SAS No.:

SDG No.: SS-5

Matrix: (soil/water) SOIL

Lab Sample ID: 76356

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: E6500

Level: (low/med) LOW

Date Received: 12/01/93

% Moisture: 10 decanted: (Y/N) N

Date Extracted: 12/16/93

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 01/04/94

Injection Volume: 2.0(uL)

Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 8.6

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

Number TICs found: 5

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.13	870	J
2.	UNKNOWN	4.21	12000	BJ
3.	UNKNOWN	5.09	14000	BJ
4.	UNKNOWN	7.49	920	J
5.	UNKNOWN	7.57	520	BJ

FORM I SV-TIC

3/90

B-83

245

## **APPENDIX C**

### **COPIES OF PERTINENT RECORDS**

<u>Reference</u>	<u>Page</u>
Grant 1987 .....	C-5
Giacobbi 1985 .....	C-9
Giacobbi 1986 .....	C-26
Bentley 1992 .....	C-29
Peck 1994 .....	C-31
NYSDEC 1993 .....	C-32
Kane 1994 .....	C-33
Paratore 1993 .....	C-34
Hupper 1989 .....	C-36

MEMORANDUM

TO: Dolores Tuohy  
FROM: Alan Grant  
SUBJECT: Old Salina Landfill Analytical Data  
DATE: October 19, 1987

The Old Salina Landfill, in Salina, New York has been the subject of several sampling efforts, and has been evaluated and ranked by NUS Corporation for the EPA. This memo will summarize the sampling results, and the information from the NUS report. Information from General Motors Corp. indicates that the company sent quantities of buffing sludge, paint sludge, and waste thinner and reducer to the landfill over the years, and there is information that suggests that unknown quantities of PCB contaminated wastes may also have gone there.

In [REDACTED], DEC obtained 3 surface water samples and 2 soil samples from the landfill and had them analyzed for PCBs. The results for the water were negative, while the soil samples showed 3.6 and 1.4 ppm PCBs.

In [REDACTED], NUS Corporation conducted a site visit in preparation for ranking the site according to the Hazard Ranking System (HRS) for EPA. During the site visit, NUS collected 5 surface soil samples from the fill area, 2 surface water and sediment samples from Ley Creek (upstream and downstream of the landfill), and a third surface water and sediment sample from an onsite drainage ditch. The sample locations are printed on the Sample Location Map attached, and the results are summarized in Tables 1 - 3.

While chemicals in ground and surface water often have standards or guidance values as published in the Division of Water TOGS document to compare them to, there are usually no set values for levels in soils. For guidance with metals I have included the common natural occurrence range for some metals, and the MAC acceptable concentration for closure of landfarming operations from: EPA 1983, Hazardous Waste Land Treatment, SW 874 (revised).

The NUS report had several observations. The Old Salina Landfill is an unlined landfill, with a high water table, adjacent to wetlands and Ley Creek. It was reported to have been capped in 1972, and there is currently a gate across the access road, but no fence. No air releases were noted using organic vapor detectors. Ponding of surface water on the landfill was observed, and leachate migrating to Ley Creek was



semi-volatile compounds were detected (compare these results with Table 1). A sample from 7 to 10 feet was analyzed for dibenzofurans (traces found) and for the hazardous substance list (Table 7). PCBs were observed at 270 ppm and low levels of several volatiles were found. Slightly higher levels of several semi-volatiles were observed in this sample compared to the sample from 5 to 7 feet. For the metals, I have added the common range and MAC values as explained earlier. Cadmium, chromium, mercury, nickel, and zinc all appear to exceed the range and/or MAC values.

At location SW-3, a soil sample from a depth of 2 to 4 feet was analyzed for pesticide/PCBs (none detected), and semi-volatiles (low levels observed). The sample is summarized as Table 10. A sample from 10 to 12 feet was analyzed for dibenzofurans (minute trace), and for the hazardous substance list (Table 11). PCBs were found at 4.9 ppm, and low levels of a few volatiles were found. Two phthalates were detected in excess of 20 ppm. Of the metals, cadmium, mercury, nickel, and zinc exceed the common range and/or MAC values.

Wells were not installed at locations SW-2 and SW-3, since the drilling encountered actual wastes. Thus, at least the deeper soil samples from the two borings are actually samples of this waste material, which according to Martin Brand appeared to be like a pudding or sludge-like material. He will forward boring logs to me shortly..

In summary, the 1987 data indicates low level contamination of soils and wastes by volatile and semi-volatile compounds. One particularly high PCB result (270 ppm) was noted. There are some high levels of several heavy metals, notably cadmium, mercury, nickel and zinc. More information needs to be developed for this site. With only one monitoring well installed, there is insufficient data concerning groundwater conditions. Additional borings and sampling are needed to categorize the extent and nature of contamination. If you have any questions concerning the analytical data, let me know and we can discuss it.

AG:ljd  
Attachments

Syracuse Plant

July 16, 1985



New York State Department of Environmental Conservation  
RTK Processing Unit  
Room 525  
50 Wolf Road  
Albany, New York 12233

Dear Sirs:

In accordance with Governor Cuomo's "Community-Right-To-Know"  
Executive Order #33, General Motors Corporation, Syracuse  
Plant is submitting:

1. Industrial Chemical Survey
2. Generator Questionnaire

to New York State Department of Environmental Conservation.

If you have any questions, Please contact the writer.

Very truly yours,

FISHER GUIDE DIVISION  
General Motors Corporation

F. J. Giacobbi  
Plant Engineer  
(315) 432-5207

cc: R. Link  
L. Williams  
J. Fannon  
D. Skiven  
P. Zavala

/emr  
Enclosure

NYSDEC

"COMMUNITY-RIGHT-TO-KNOW" EXECUTIVE ORDER #33

ICS #: 0100359  
GENERAL MOTORS CORPORATION

1000 TOWNLINE RD PO  
SYRACUSE NY 13221

INDUSTRIAL CHEMICAL SURVEY (ICS)

INSTRUCTIONS

- A. If you have submitted an ICS form to the Department since January 1, 1980 (1), please check the box below, sign and return (2), this sheet.



ICS submitted since January 1, 1980

X



Signature

8/19/85

Date

- B. If you have not submitted an ICS form to the Department since January 1, 1980, please complete and return (2) the attached ICS form.

NOTE: (1) If you wish to update the ICS currently on file you may do so by completing and returning the enclosed forms.

(2) All materials are to be returned in the enclosed self-addressed envelope.

EPA I. D. 002239440

SUBSTANCES OF CONCERN  
(Refer to attached TABLE 2)

- 1 PRODUCED  
2 REACTED  
3 BLENDED  
4 PACKAGED

- 5 DISTRIBUTED  
6 NO LONGER USE  
7 CLEANING  
8 OTHER (SPECIFY)

Complete all information for those substances your facility has used, produced, stored, distributed or otherwise disposed of since January 1, 1971. Do not include chemicals used only in analytical laboratory work. Enter the name and code from Table 2. If facility uses a substance in any of the Classes A - F which is not specified in the list, enter it as code class plus 99, e.g. 999 with name, usage, etc.

NAME OF SUBSTANCE	CODE	AVERAGE ANNUAL USAGE	AMOUNT NOW ON HAND	(✓)		PURPOSE OF USE ENTER THE APPROPRIATE CODE(S) FROM ABOVE
				Gal.	Lb.	
MALATHION	EOT	40	0	X		MOSQUITO CONTROL *
DIAZINON	C13	6	0	X		PEST CONTROL *
VIESBAN (EPA #373-96)	C99	6	0	X		PEST CONTROL *
ICAM W (EPA 10065-3 AH-876)	C99	3	0	X		PEST CONTROL *
STON PAT TRAF. (EPA 56-18)	C99	20	0	X		PEST CONTROL *
CRENTI (EPA 12455-6 AH)	C99	10	0	X		RODENT CONTROL *
UTROL	C99	0.5	0	X		RODENT CONTROL *
XYLNE (XYLO)	N3	26.71	475.2	X		BIRD CONTROL *
CINCHENOL THINER (DOT 1734)	D99	4345	330	X		PAINT REDUCER
UNIL SOLVENT 11-31	D44	4712	455.5	X		PAINT THINNER
KEON	AEI	575	50	X		PAINT LINE FLUSH THINNER
PAINTS & PRIMERS	D99	125,000	11,000	X		PAINT CONDITIONING SYSTEMS
ETHYLENE GLYCOL	AC3	160	600	X		PAINT THINNER
UNIL SOLVENT 1571	D44	126.5	220	X		PAINT THINNER
ETHYLENE GLYCOL	D44	230	220	X		PAINT THINNER
UNIL SOLVENT 11-31	D44	14314	446.2	X		PAINT THINNER
ETHYLENE GLYCOL	D44	40	40	X		PAINT THINNER
UNIL SOLVENT 11-31	D44	5	5	X		PAINT THINNER
UNIL SOLVENT 11-31	D44	11.5	11.5	X		PAINT THINNER

\* THE AMOUNTS LISTED ARE FINISHED PRODUCT QUANTITIES AFTER RECOMMENDED DILUTION. USED BY NUTSIDE LINC. APPLICATION.

USE CHEMICALS OF UNKNOWN COMPOSITION, list trade name or other identification, name of supplier and complete information.

NAME OF SUBSTANCE	AVERAGE ANNUAL USAGE	AMOUNT NOW ON HAND	(✓)		SUPPLIER	PURPOSE OF USE ENTER THE APPROPRIATE CODE(S) FROM ABOVE
			GAL.	LB.		

I hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 230.45 of the Penal Law.

SURE (Owner, Partner, or Officer)

(Printed or typed)

ROLAND F. LINK

TITLE

PLANT MANAGER

DATE

6/1/85

BOX 4869, 1000 TOWN LINE ROAD

RACUSE

 STATE  
N.Y.

ZIP

3221

PART - H

DATE 6/20/8

1. HAZARDOUS WASTE DISPOSAL SITE (SEE INSTRUCTIONS)	2. DESCRIPTION OF HAZARDOUS WASTES DEPOSITED AT THIS LOCATION (SEE INSTRUCTIONS)	3. EPA WASTE CODE	4. WASTE DISPOSED OF QUANTITY OF WASTE (TONS)	FORM DISPOS CODES			5. WASTE DISPOSAL DATES	6. TRANSPORTER HAZARDOUS W. (SEE INSTRUCTIONS)
Tantalo Landfill Saloman Rd. Seneca Falls, N.Y.	Paint Sludge & Kolene Sludge	D002	No Record		X		Cal. Year 1974	Onondaga Environ- mental Systems 4439 James St. E. Syracuse, N.Y.
Tantalo Landfill Saloman Rd. Seneca Falls, N.Y.	Paint Sludge & Kolene Sludge	D002	417 Tons	X	X	X	Cal. Year 1975	Onongaga Environ- mental Systems 4439 James St. E. Syracuse, N.Y.
Tantalo Landfill Saloman Rd. Seneca Falls, N.Y.	Paint Sludge & Kolene Sludge	D002	1100 Tons		X	X	Cal. Year 1976	Onondaga Environ- mental Systems 4439 James St. E. Syracuse, N.Y.
Tantalo Landfill Saloman Rd. Seneca Falls, N.Y.	Paint Sludge & Kolene Sludge	D002	No Record		X	X	Cal. Year 1977	Onondaga Environ- mental Systems 4439 James St. E. Syracuse, N.Y.
Tantalo Landfill Saloman Rd. Seneca Falls, N.Y.	Paint Sludge & Kolene Sludge	D002	No Record		X	X	1/78-6/78	Onondaga Environ- mental Systems 4439 James St. E. Syracuse, N.Y.
New Chemical Waste Systems	Paint Sludge & Kolene Sludge	D002	544 Tons		X		Cal. Year 1979	Onondaga Environ- mental Systems 4439 James St. E. Syracuse, N.Y.
ecos International 626 Royal Ave. Seneca Falls, N.Y.	Paint Sludge & Kolene Sludge	D002	168.99 Tons		X		Cal. Year 1980	Onondaga Environ- mental Systems 4439 James St.

STATE N.Y.	ZIP 13221
---------------	--------------

DATE 6/20/8

1. HAZARDOUS WASTE DISPOSAL SITE (SEE INSTRUCTIONS)	2. DESCRIPTION OF HAZARDOUS WASTES DEPOSITED AT THIS LOCATION (SEE INSTRUCTIONS)	3. EPA WASTE CODE	4. WASTE DISPOSED OF QUANTITY OF WASTE (TONS)	FORM			5. WASTE DISPOSAL DATES	6. TRANSPORTER HAZARDOUS WA (SEE INSTRUCT
				LIQUID	SOLID	DRUMS		
Transporter Owned Site	Industrial Waste Treatment Sludge	N/A	10,853		X		1962 Thru 1969	Joseph Brillo Coon Hill Road Skaneateles, N.Y.
Smoral Rd. Landfill Town of Onondaga Onondaga County New York	Industrial Waste Treatment Sludge	N/A	4,960		X		Jan. 1970 Mar. 1974	Mathieson Trash Service Pleasant Valley Marcellus, N.Y.
Pantalo Landfill Salesman Rd. Seneca Falls, N.Y.	Industrial Waste Treatment Sludge	N/A	448		X		Mar. 1974 June 1978	Onondaga Enviro mental 4439 James St. E. Syracuse, N.Y.
Newco Chemical Waste Systems Niagara Falls, N.Y.	Industrial Waste Treatment Sludge	N/A	336		X		June 1978 Dec. 1981	Onondaga Enviro mental 4439 James St. E. Syracuse, N.Y.

C-19

ecology and environment

BOX 4869, 1000 TOWN LINE ROAD

PART II

ACUSE

STATE  
N.Y.

ZIP

13221

DATE 6/20/85

1. HAZARDOUS WASTE DISPOSAL SITE  
(SEE INSTRUCTIONS)2. DESCRIPTION OF HAZARDOUS WASTES  
DEPOSITED AT THIS LOCATION  
(SEE INSTRUCTIONS)3. EPA  
WASTE  
CODE4. WASTE DISPOSED OF  
QUANTITY OF WASTE  
(TONS)FORM  
LIQ  
SOL  
SOL5. WASTE  
DISPOSAL  
DATES6. TRANSPORTER OF  
HAZARDOUS WASTE  
(SEE INSTRUCTIONS)

On site Landfill

Paint Sludge

D002

No Record

X X

Oct. 1952  
Dec. 1961

N/A

Town of Salina Landfill  
Route 11  
Town of Salina  
Onondaga County

Paint Sludge

D002

540

X X

Jan. 1962  
Dec. 1967Refuse Div.  
Contract  
Trucking Corp.Transporter's  
Landfill

Paint Sludge

D002

120

X X

Jan. 1968  
Feb. 1969J. Brillo Co.  
Coon Hill Rd.  
Skaneateles, N.Y.Town of Salina Landfill  
Route 11  
Town of Salina  
Onondaga County

Paint Sludge

D002

100

X X

Mar. 1969  
Dec. 1969J. Brillo Co.  
Coon Hill Rd.  
Skaneateles, N.Y.Herschfelter Landfill  
Town of Onondaga  
Onondaga County

Paint Sludge

D002

480

X X

Jan. 1970  
Dec. 1973Mathieson Trash  
Service- Pleasant  
Valley Rd.,  
Marcellus, N.Y.

BOX 4869, 1000 TOWN LINE ROAD  
 RACUSE STATE N.Y. ZIP 13221

DATE 6/20/85

1. HAZARDOUS WASTE DISPOSAL SITE (SEE INSTRUCTIONS)	2. DESCRIPTION OF HAZARDOUS WASTES DEPOSITED AT THIS LOCATION (SEE INSTRUCTIONS)	3. EPA WASTE CODE	4. WASTE DISPOSED OF QUANTITY OF WASTE (TONS)	FORM LIQUID SOLID DRUMS			5. WASTE DISPOSAL DATES	6. TRANSPORTER OF HAZARDOUS WASTE (SEE INSTRUCTIONS)
Cecos International P.O. Box 619 Niagara Falls Blvd. Niagara Falls, N.Y.	PCB's	B001	.0704 Tons	X			Calendar Year 1980	Cecos International
Cecos International P.O. Box 619 Niagara Falls Blvd. Niagara Falls, N.Y.	PCB's	B001	None				Calendar Year 1981	Cecos International
Cecos International P.O. Box 619 Niagara Falls Blvd. Niagara Falls, N.Y.	PCB's	B001	None				Calendar Year 1978	Cecos International
Cecos International P.O. Box 619 Niagara Falls Blvd. Niagara Falls, N.Y.	PCB's	B001	None				Calendar Year 1979	Cecos International
							1952 - 1977	No written records available

recycled paper

recycled paper and 21% minimum



SHIR GUIDE IV, WAC EPA  
 BOX 4869, 1000 TOWN LINE ROAD  
 RACUSE STATE N.Y. ZIP 13221

DATE 6/20/85

1. HAZARDOUS WASTE DISPOSAL SITE (SEE INSTRUCTIONS)	2. DESCRIPTION OF HAZARDOUS WASTES DEPOSITED AT THIS LOCATION (SEE INSTRUCTIONS)	3. EPA WASTE CODE	4. WASTE DISPOSED OF QUANTITY OF WASTE (TONS)	FORM			5. WASTE DISPOSAL DATES	6. TRANSPORTER OF HAZARDOUS WASTE (SEE INSTRUCTIONS)
				LIQUID	SOLID	DRUMS		
On site Landfill	Combination of boiler fly ash and bottom ash	N/A	No written records avail- able.		X		Approx. 1952 - 1961	Self
On site fill & cover	Combination of boiler fly ash and bottom ash	N/A	No written records available		X		Approx. 1962 - 1970	Self
Town of Salina Landfill Route 11 Town of Salina Onondaga County	Combination of boiler fly ash and bottom ash	N/A	10,092 T		X		Jan. 1971 Mar. 1974	Mathieson Trans Service Pleasant Valley Marcellus, N.Y.
Onondaga Environmental Landfill Owl Road Clayton, N.Y.	Combination of boiler fly ash and bottom ash	N/A	21,278 T		X		Mar. 1974 Aug. 1978	Onondaga Environ mental Systems 4439 James St. E. Syracuse, N.Y.
Onondaga Landfill Systems Sagoral Road Syracuse, N.Y.	Combination of boiler fly ash and bottom ash	N/A	1,312 T		X		Aug. 1978 Apr. 1979	Onondaga Environ mental Systems 4439 James St. E. Syracuse, N.Y.
Sealand Restoration Town of Lisbon St. Lawrence County	Combination of boiler fly ash and bottom ash	N/A	329 T		X		Apr. 1979 June 1979	Sealand Restoration
Onondaga Landfill Systems	Combination of boiler fly ash and bottom ash	N/A	5,151 T		X		June 1979 Dec. 1981	Onondaga Environ mental Systems 4439 James St.



2. Who handled our general trash?

Answer: Our general trash was transported to the Onondaga County Solid Waste Authority by A & T Haulers since 1979 according to existing records (Attachment B1). Internal correspondence (Attachment B2) dated May 19, 1971, indicates that Leaseway Haulers, Inc. was responsible for general trash consisting of garbage, cardboard, all scrap plastic, and floor dry. This material was taken to the Town of Salina Dump by permit. The following industrial trash haulers handled our general trash during the indicated time periods: Leaseway Haulers, 1/1/73 through 5/31/73; A & T Haulers, 6/1/73 through 5/31/74; and Matthieson Trash Service, 1/1/73 through 12/31/73 (Attachment B3). In our letter to Mr. Larry Gross, NYDEC, dated March 31, 1976, A & T Haulers is again identified as our general trash hauler for 1975 (Attachment B4).

3. Provide copies of Annual Generator Reports 1982 through 1985.

Answer: Reports are attached (Attachments C1 through C4).

4. Provide Fly Ash Analysis.

Answer: Attachment D is a recent analysis report for fly ash and should be considered typical.

5. Provide Paint Sludge Analysis.

Answer: Attachment E is a recent analysis report for paint sludge and should be considered typical of Paint Room non-PCB sludge.

6. Provide Industrial Waste Treatment Sludge Analysis.

Answer: Attachments F1 and F2 represent this sludge for the dates indicated on the reports.

7. PCB Analysis for Hydraulic Oil.

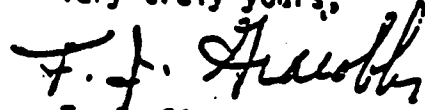
Answer: Hydraulic oil from molders tested 12/79 shows a low of 40 P.P.M., average at 148 P.P.M. and a high of 234 P.P.M. Attachments G1 through G3 document these figures. We are currently at less than 20 P.P.M. in all reservoirs and have been for over two years.

8. Calculate or estimate mass flow PCB from 1979 through 1983 that left our plant.

Answer: We know of no other way of improving upon the estimates indicated in the EPA complaint which estimated that 87,000 kg of contaminated trash went to our local landfills from 1979 to mid-1983. Based on this figure, we calculate that 10 lbs. to 30 lbs. maximum of PCBs were sent.

Please do not hesitate to call if you have any questions.

Very truly yours,



F. J. Giacobbi  
Plant Engineer  
(315) 432-5207

/dr

Attachments

cc: R. Link

General Motors Corporation  
Legal Staff

Facsimile  
313-974-7770

Telephone  
313-974-1963

EXPRESS MAIL

July 17, 1992

Mr. Chad Eich  
Ecology and Environment Engineering, P.C.  
Buffalo Corporate Center  
368 Pleasantview Drive  
Lancaster, New York 14086

Dear Mr. Eich:

RE: Buffing Sludge and Fly Ash Process Generation and Composition

Pursuant to your letter of June 26, 1992, I contacted our Inland Fisher Guide plant in Syracuse, New York. Buffing sludge was generated as follows:

1. Until 1973, an activity at the plant was the fabrication of wheel discs and hubcaps. After the discs and hubcaps were formed in the press line and heat treated as required, they were buffed using cloth buffing wheels. A buffing compound was used during the process. The sludge was formed from the excess buffing compound which built up on and under the buffing units. The buffing wheels were made of cloth and as they wore down, the fibers became part of the sludge. In addition, some automatic buffing units had water wash centerspray units which scrubbed the exhaust air. Periodically, the water was drained and the remaining sludge was disposed of as buffing sludge.
2. Until 1971-72, the plant had a die casting process. As with the wheel disc line, these parts were buffed in a similar manner and sludge generated.
3. For approximately 2 years around 1959, an extruding process was used for aluminum moldings which were also buffed creating a sludge.

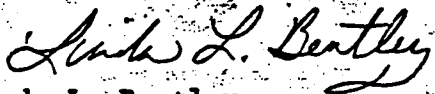
No records have been found which note the types or makeup of the buffing compounds. Wheel discs and hubcaps were made of stainless steel, steel and brass. Zinc was used in the die casting process.

Mr. Chad Eich  
July 17, 1992  
Page 2

Fly ash was generated at the Powerhouse from the combustion of coal in boilers used to produce steam. Analysis reports from the relevant time for the Salina Town Landfill and Brighton Landfill no longer exist. Attached is an analysis report from 1986 which should be considered typical.

If I can be of any further assistance, please contact me.

Very truly yours,



Linda L. Bentley  
Legal Assistant

enclosure

c: D. A. Schiemann, Esq.  
W. Kochem

# TELEPHONE LOG

11/31/94

1055 AM

To: Bob Ventre (315) 478-2839  
From: Dennis Peck

Mr. Ventre is the Town of Salina attorney and was involved with the landfill for the Town in the 70s and 80s. David Utt (Town of Salina Supervisor) suggested I call Mr. Ventre.

Mr. Ventre stated that East Playa Inc. owned the site during the time of landfiling and leased the land to the Town. The Town purchased the land (29 acres) sometime between 1978-82. There was litigation at the time w/ East Playa. The attorneys recommended the Town buy the site so they wouldn't have to deal w/ East Pl. Mr. Ventre believes the Town purchased all of the land that was filled.



# WRITTEN CONFIRMATION OF VERBAL COMMUNICATION

Project: TOWN OF SALINA LANDFILL

Date: 12/12/93 Time: 11:00 AM

☒ Telephone

☐ Meeting

From: ALYSE PICKHOLTZ <sup>70504 C. NYSDEC</sup>

Location: DEC 1 1993

To: JACK DALEY ONONDAGA COUNTY ENGINEER Attendees:

Telephone Number: (315) 435-2260

BUREAU OF  
HAZARDOUS SITE CONTROL  
DIVISION OF HAZARDOUS  
WASTE REMEDIATION

RE: STATUS OF ABANDONED LEY CREEK TRUNK SEWER

MR. DALEY STATED THAT WHEN THE SEWER WAS ABANDONED, ALL OF THE MANHOLES ON THE SALINA TOWN LANDFILL SITE WERE FILLED IN WITH LIMESTONE, AND THEIR COVERS REMOVED. THE ONLY EXCEPTION TO THIS IS MH 9, WHICH IS NOW PART OF THE NEW SEWER LINE. THE LEY CREEK TRUNK SEWER IS BULKHEADED ON BOTH THE EASTERN AND WESTERN ENDS OF THE SITE. THOUGH BULKHEADED AT BOTH ENDS, IT IS STILL POSSIBLE THAT CONTAMINANTS MAY MIGRATE ALONG THE BEDDING OF THE SEWER LINE.

@ @ MH the sewer pipe was bulkheaded

in the area of MH 9 the new LCTS pass through old LCT. at this junction both ends of the LCTS was bulkhead off.

The old Malley's sewer was diverted into the new LCTS near the NYS Thruway. The MH of the Malley's IS from the diversion to the old LCTS was bulkhead and filled with limestone.

Signature

Jack Daley Construction Supervisor

Page 1 of 1



# TELEPHONE LOG

3/1/94

1045 AM

To: Leo Kane <sup>(315) 457-6711</sup> Calocerinos + Spina Engineers  
From: Dennis Peck

Mr. Kane was the managing engineer for the covering and grading of the Salina Town Landfill in 1981. I called him to discuss the background of the Salina site and his knowledge of what areas were filled and covered. He said most or all of his records had been archived, but from his memory, he believed that most of the 50 acre site had been filled including the parcel now owned by John Paratore.



# ecology and environment engineering, p.c.

BUFFALO CORPORATE CENTER  
368 PLEASANTVIEW DRIVE, LANCASTER, NEW YORK 14086, TEL. 716/684-8060

## INTERVIEW ACKNOWLEDGMENT FORM

SITE NAME: Salina Town Landfill  
SITE I.D. NUMBER: 734036  
DATE: July 14, 1993  
PERSON CONTACTED: Mr. John Paratore  
PHONE NUMBER: (315)455-5551  
AFFILIATION: Property owner,  
Paratore Signs  
ADDRESS: 1551 Brewertown RD  
Syracuse, New York 13208  
CONTACT PERSON: Jim Richert *J.R.*  
TYPE OF CONTACT: Telephone

## INTERVIEW SUMMARY

Mr. Paratore introduced himself to NYSDEC, E & E, and Joseph Lu personnel at the Salina Town Landfill on Wednesday, July 7, 1993, and provided much information about the site and its history. Mr. Paratore agreed to be interviewed by E & E at a later time.

On Monday, July 12, 1993, Jim Richert of E & E. phoned Mr. Paratore to confirm the following information which was learned on July 7:

- o Mr. Paratore owns two parcels of land adjacent to, and possibly part of, the Salina Town Landfill. The Parcels numbers are 73-1-03 and 73-1-10.3 and are <1.0 and 14.92 acres each, respectively. Mr. Paratore purchased both parcels of land in October of 1985 from East Plaza Inc., of which a Mr. Joseph Basil of Basil Construction Company, is or was a partner.
- o The same East Plaza Inc. also leased the land that is now the town landfill to the Town of Salina before selling it to the town in the late 1970's.
- o An abandoned sanitary sewer line exists under the landfill in the approximate center of the landfill and is oriented in an east/west direction. This sewer line is owned by the

County of Onondaga and has been replaced by a line which runs along the east side of the landfill northward to the south shoulder of I-90 where it ties into another line which parallels this Thruway.

- o The Town of Mattydale (north of the site) also has an abandoned sanitary sewer line which runs from north to south and ties into the old east/west county line. The Mattydale line was installed, at least in part, across Mr. Paratore's land without permission from or notification to Mr. Paratore. Presently, the Mattydale sewer line runs from the north, under the Thruway, and ties into the same east/west county line along the south side of the Thruway. During the abandonment of the Mattydale sewer line segment soil fill was brought to the right-of-way from Factory Ave. and used for cover material. Some soils from Factory Ave. were found to contain hazardous industrial waste from studies unrelated to this site. Some of the soil cover was placed on Mr. Paratore's land, again without his permission. The contractor who performed the sewer line abandonment for the Town of Mattydale was named Memphis Construction.
- o Previous investigations have been performed at the landfill and Mr. Paratore has photocopies of some of this data as well as maps of sewer lines and logs of soil borings and wells of which E & E requests copies.

#### ACKNOWLEDGMENT

I have read the above transcript and I agree that it is an accurate summary of information verbally conveyed to Ecology and Environment, Inc.'s interviewer, Jim Richert, as revised below, if necessary.

REVISIONS (please line-out and initial any incorrect information in the above transcript and write in the lines below any additional information that may have been left out of the transcript.

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Signature: \_\_\_\_\_

Date: \_\_\_\_\_

CTF: YR-3000



LAW DEPARTMENT

100 CHURCH STREET  
NEW YORK, N.Y. 10007

Room 6 D 16  
PETER L. ZIMROTH  
Corporation Counsel

RECEIVED

JUN 09 1989

NYSDEC  
WHITE PLAINS  
D.E.E.

(212) 566- 0746

*Lo Evans*

May 30, 1989

*FXE*

David Markell, Esq.  
Director of Enforcement  
New York State Department of  
Environmental Conservation  
50 Wolf Road  
Albany, NY 12233

Re: Hazardous waste site near Town of Salina

Dear Mr. Markell:

In the course of this office's discovery of Carrier Corporation in City of New York v. Exxon Corporation, et. al., we found very strong evidence that drummed waste from Carrier's Thompson Road plant in Syracuse was dumped from 1974 to 1979 in a landfill in the Town of Salina. I enclose affidavits to this effect of Joseph and John Peta, who ran a trucking company in the 1970's. The affidavits were drafted by counsel for Carrier for use in Exxon. I interviewed the Petas in person and firmly believe the affidavits to be true. Pickup slips indicate that the Petas picked up about 100,000 gallons of drummed waste.

The Petas did not know what substances were in the drums, but at least some of it was hazardous. Carrier documents and the deposition testimony of Nicholas Chudyk, Carrier's environmental engineer, suggest that the drums contained methylethylketone, toluene, xylene, and solder flux, among many other substances. I enclose for the sake of illustration a Carrier description of liquid waste anticipated for 1978, used to bid its waste disposal contract. See items 3-6 of pages 103262-63 for a summary of anticipated drummed waste.

Please do not hesitate to call me if you have any questions.

RECEIVED

JUN 2 1989

DIVISION OF  
ENVIRONMENTAL ENFORCEMENT  
CENTRAL OFFICE

cc: Lorna Goodman

Sincerely,

*John R. Hupper, Jr.*

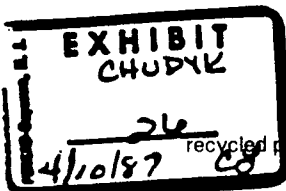
John R. Hupper, Jr.  
Assistant Corporation Counsel  
Affirmative Litigation Division

CARRIER CORPORATION  
CARRIER PARKWAY  
SYRACUSE, NEW YORK 13221

SPECIFICATIONS  
FOR THE  
REMOVAL AND DISPOSAL  
OF  
INDUSTRIAL LIQUID WASTE

DATE  
FEBRUARY 10, 1978

PREPARED BY:  
NICHOLAS CHUDYK  
ENVIRONMENTAL CONTROL ENGINEER  
FACILITIES SERVICES DEPARTMENT  
ADMINISTRATION



C-37

**N** 103257

ecology and environment

**1.00 GENERAL INTENT**

- 1.01 THE GENERAL INTENT OF THIS CONTRACT IS TO PROVIDE SERVICES TO PICK UP AND DISPOSE OF SPENT CHEMICALS AND OTHER INDUSTRIAL LIQUID WASTES AS INDICATED ON THE ATTACHED INVENTORY LIST.
- 1.02 A DESCRIPTION OF WASTES GENERATED AT THE CARLYLE COMPRESSOR PLANT ON CHRYSLER DRIVE (AS PER THE INVENTORY LIST) IS FOR THE BIDDER'S USE TO INCLUDE THE COST TO REMOVE AND DISPOSE OF SUCH WASTES IN ADDITION TO THE REMOVAL OF WASTES FROM THOMPSON ROAD SITE PLANTS.
- 1.03 TWO (2) SEPARATE PURCHASE ORDERS WILL BE ISSUED, ONE (1) FOR THE THOMPSON ROAD FACILITIES AND ONE (1) FOR THE CHRYSLER DRIVE FACILITIES, WHICH WILL BE ISSUED BY THE CARLYLE COMPRESSOR COMPANY PURCHASING DEPARTMENT.

**2.00 LOCATION OF WORK**

- 2.01 THE WORK UNDER THESE SPECIFICATIONS WILL TAKE PLACE AT THE CARRIER CORPORATION'S THOMPSON ROAD SITE AND AT THE CHRYSLER DRIVE SITE.
- 2.02 INDUSTRIAL LIQUID WASTES WILL BE PICKED UP AT VARIOUS POINTS AT THESE TWO (2) SITE LOCATIONS AS INDICATED ON THE ATTACHED SITE PLAN.

**3.00 CONTRACT TERMS**

- 3.01 THE CONTRACT WILL BE EFFECTIVE FOR A TWELVE (12) MONTH PERIOD BEGINNING ON APRIL 1, 1978 AND TERMINATING ON MARCH 31, 1979.
- 3.02 CARRIER PURCHASE ORDERS SHALL BE USED IN CONJUNCTION WITH THESE SPECIFICATIONS AND THE INSTRUCTIONS TO BIDDERS AS THE AGREEMENT BETWEEN THE OWNER AND THE CONTRACTOR INVOLVED.
- 3.03 THE OWNER RESERVES THE RIGHT TO ACCEPT ANY PROPOSAL OR REJECT ALL PROPOSALS OR PART OF ANY PROPOSAL OR TO AWARD THE WORK TO OTHER THAN THE LOWEST BIDDER AS SERVES THE BEST INTERESTS OF THE OWNER.
- 3.04 THE OWNER RESERVES THE RIGHT TO TERMINATE THE CONTRACT IF SERVICE IS UNSATISFACTORY.
- 3.05 A COPY OF FORM 47-06-1, "SEPTIC TANK CLEANER AND INDUSTRIAL WASTE COLLECTOR CERTIFICATE OF REGISTRATION", APPROVED BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, WILL BE PROVIDED TO THE OWNER BY THE CONTRACTOR AT THE TIME QUOTATION IS SUBMITTED. THIS CERTIFICATE WILL SHOW THE KINDS OF WASTES REMOVED FROM CARRIER AND WILL BE VALID FOR THE PERIOD COVERED BY THE CONTRACT.

**4.00 MATERIALS TO BE REMOVED AND DISPOSED OF:**

**4.01 SPENT ACIDS AND ALKALIS, MIXED.**

- A. APPROXIMATELY 150,000 GALLONS PER YEAR FROM UNDERGROUND PITS AT TWO (2) LOCATIONS.

**4.02 WATER SOLUBLE COOLANT**

- A. APPROXIMATELY 400,000 GALLONS PER YEAR FROM AN UNDERGROUND PIT.

**4.03 FLAMMABLE SOLVENTS AND THINNERS**

- A. APPROXIMATELY 500 GALLONS PER YEAR OF MIXED HYDROCARBON SOLVENTS IN DRUMS FROM THE DRUM STORAGE AND DISPOSAL POINT.

**4.04 SOLVENT BASE ALKYD AND ACRYLIC PAINT**

- A. APPROXIMATELY 1,000 GALLONS PER YEAR OF RAW ENAMEL BAKE TYPE PAINT WITH SOLVENTS, THINNERS AND DILUENTS IN DRUMS FROM THE DRUM STORAGE AND DISPOSAL POINT.

**4.05 SOLDER FLUX**

- A. APPROXIMATELY 1,000 GALLONS PER YEAR OF REACTION SOLDERING FLUX (CHLORIDES) IN DRUMS FROM THE DRUM STORAGE AND DISPOSAL POINT.

**4.06 LIQUID SLUDGES, MISCELLANEOUS**

- A. APPROXIMATELY 24,000 GALLONS PER YEAR OF CHEMICAL SLUDGES IN OPEN END DRUMS AT VARIOUS PICK-UP POINTS.

**4.07 WASTE OILS**

- A. APPROXIMATELY 320,000 GALLONS PER YEAR FROM THE CARLYLE COMPRESSOR COMPANY. (CONTRACTOR TO PROVIDE CONTAINER FOR COLLECTION.)

**4.08 WATER EMULSION PAINT**

- A. APPROXIMATELY 4,000 GALLONS PER YEAR OF WATER BASE PAINT IN DRUMS FROM THE CARLYLE COMPRESSOR PLANT.

**5.00 PICK UP PROCEDURE**

- 5.01 ALL PICK UPS WILL BE MADE UPON THE REQUEST OF THE OWNER.

- 5.02 THE CONTRACTOR WILL RECEIVE 24-HOUR NOTICE THAT A PICK UP IS TO BE MADE.

**5.00 PICK UP PROCEDURE (CONTINUED)**

- 5.03 THE STORAGE CAPACITY OF THE WASTE COOLANT PIT AND THE ACID AND ALKALI PIT, BOTH LOCATED NORTH OF BUILDING TR-6, IS 20,000 GALLONS EACH. ALSO, THE STORAGE CAPACITY OF THE TWO (2) PITS WEST OF BUILDING TR-1, WHICH WILL BE USED FOR ACIDS AND ALKALI ONLY, IS 8,000 GALLONS EACH.
- 5.04 THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY OF PUMPING BOTH THE MIXED ACID AND ALKALI AND THE COOLANT FROM THE PITS INTO THE HAULING VEHICLE.
- 5.05 THE CONTRACTOR SHALL PICK UP DRUMS OF LIQUID WASTES IN LOTS OF 40 PER TRUCK LOAD. CONTRACTOR SHALL SEE THAT BUNGS ARE IN PLACE AND THAT OPEN END DRUMS ARE COVERED BEFORE HANDLING AND TRANSPORTING TO ELIMINATE SPILLAGE.
- 5.06 AT THE TIME OF EACH PICK UP, A THREE-PART DELIVERY TICKET SUPPLIED BY THE CONTRACTOR SHALL BE SIGNED BY THE DRIVER AND AN AUTHORIZED REPRESENTATIVE OF THE OWNER WITH DISTRIBUTION AS FOLLOWS:

- 1 COPY - OWNER - INFORMATION
- 1 COPY - CONTRACTOR - TO BE SUBMITTED TO THE OWNER'S ACCOUNTS PAYABLE DEPARTMENT ALONG WITH MONTHLY INVOICE
- 1 COPY - CONTRACTOR - INFORMATION

**6.00 DISPOSAL**

- 6.01 THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY FOR THE LAWFUL DISPOSAL OF ALL INDUSTRIAL LIQUID WASTES THAT HE PICKS UP.
- 6.02 THE OWNER RESERVES THE RIGHT TO TERMINATE THE CONTRACT IF UNLAWFUL DISPOSAL METHODS ARE USED.

**7.00 HOUSEKEEPING**

- 7.01 IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAN UP ANY SPILLS CAUSED BY THE CONTRACTOR IN THE REMOVAL OF THE INDUSTRIAL LIQUID WASTES.



**8.00 BIDDERS QUOTATION**

**8.01 ALL QUOTATIONS WILL BE SENT DIRECTLY TO:**

CARRIER CORPORATION  
THOMPSON ROAD SITE  
PURCHASING DEPARTMENT, BUILDING TR-1  
POST OFFICE BOX 4801  
SYRACUSE, NEW YORK 13221

ATTENTION: MR. A. F. DRAZEK

**8.02 THEY ARE TO BE IN THE HANDS OF MR. DRAZEK BY FRIDAY, MARCH 17, 1978.**

**8.03 EACH BIDDER SHALL SUBMIT THE FOLLOWING INFORMATION FOR THE REMOVAL AND DISPOSAL OF ALL WASTES:**

- A. PRICE PER GALLON - STRAIGHT TIME PICK-UP;
- B. PRICE PER GALLON - EVENING PICK-UP;
- C. PRICE PER GALLON - WEEKEND PICK-UP;
- D. THE CAPACITY IN GALLONS OF THE PICK-UP VEHICLE;
- E. PRICE (IF ANY) OF THE CONTRACTOR-FURNISHED CONTAINER FOR THE COLLECTING OF WASTE OILS AT THE CARLYLE COMPRESSOR COMPANY AS STATED IN SECTION 4.07.

**8.04 A BIDDER MAY SUBMIT A QUOTATION FOR THE REMOVAL OF ALL OR PART OF THE LIQUID WASTES.**

**9.00 INSURANCE**

**9.01 THE SUCCESSFUL CONTRACTOR SHALL SUPPLY THE OWNER WITH CERTIFICATES OF INSURANCE COVERAGE FOR THE FOLLOWING AMOUNTS, PRIOR TO THE START OF WORK:**

A. STATUTORY NEW YORK STATE WORKMEN'S COMPENSATION;

B. GENERAL LIABILITY INSURANCE -

BODILY INJURY:	EACH PERSON	- \$100,000
	EACH ACCIDENT	- \$300,000
PROPERTY DAMAGE:	EACH ACCIDENT	- \$ 50,000

C. VEHICLE LIABILITY INSURANCE -

BODILY INJURY:	EACH PERSON	- \$100,000
	EACH ACCIDENT	- \$300,000
PROPERTY DAMAGE:	EACH ACCIDENT	- \$ 50,000

# INDUSTRIAL LIQUID WASTE INVENTORY

NOTE: OWNER WILL PROVIDE SAMPLES AS REQUIRED BY CONTRACTOR

ITEM	DESCRIPTION	QUANTITY	FREQUENCY	PICK-UP POINT	CONTAINER	DESCRIPTIVE ANALYSIS	REMARKS
1A.	<u>MIXED ACIDS AND ALKALIS</u>	50,000 GAL/YEAR	(3) 3500-GALLON TRAILERS ONCE PER MONTH--4 TIMES PER YEAR	CONCRETE PITS (WEST OF TR-1)	CONTRACTOR TRAILER & PUMPER	MIX OF EQUAL VOLUMES OF SULFURIC ACID (10%) & ALKALI CLEANER (NaOH - 20 OZ./GAL.). DUMPED ACID CONTAINS 5% BY WEIGHT IRON; CLEANER CONTAINS META SILICATES AND ROSIN TYPE SOAPS.	ACID AND CAUSTIC ARE DUMPED AT THE SAME TIME. REACTION RESULTS IN SLUDGES (SULFATES) WHICH MUST BE REMOVED ONCE PER YEAR.
1B.	<u>MIXED ACIDS AND ALKALIS</u>	100,000 GAL/YEAR	(2) 3500-GALLON TRAILERS/MONTH	NORTH CONCRETE PIT (NORTH OF TR-6)	CONTRACTOR TRAILER & PUMPER	MIX OF ACIDIC AND ALKALINE TYPE CLEANERS. APPROXIMATELY 70% BY VOLUME IS INHIBITED PHOSPHORIC ACID AND SODIUM HYDROXIDE. REMAINDER IS PHOSPHATES, NITRITES, SILICATES, ETC.	REACTION RESULTS IN SLUDGES (PHOSPHATES, ETC.) WHICH MUST BE REMOVED ANNUALLY BY CONTRACTOR.
2.	<u>WATER SOLUBLE COOLANT</u>	400,000 GA/YEAR	(10) 3500-GALLON TRAILERS/MONTH	SOUTH CONCRETE PIT (NORTH OF TR-6)	CONTRACTOR TRAILER & PUMPER	MIXTURE OF WATER EMULSION COOLANTS, SUCH AS, CINCOOL, TOOLEZE, SWAN, ETC., AVERAGE 25 PARTS WATER TO 1 PART COOLANT.	COOLANTS DUMPED INTO SOUTH PIT ALONG WITH KEROSENE AND WASTE OILS.
3.	<u>SOLVENT AND THINNERS</u>	500 GAL/YEAR	(3) 55-GALLON DRUMS ONCE PER MONTH--3 TIMES PER YEAR	DRUM STORAGE & DISPOSAL COLLECTION AREA	30-GAL. OR 55-GAL. STEEL DRUM WITH BUNGS	MIXTURE OF ORGANIC SOLVENTS (TOLUENE, XYLENE, MEK, ETC.) WITH LESS THAN (5%) ALKYD OR ACRYLIC PAINT PIGMENT AND RESINS (FROM PAINT SPRAY EQUIPMENT CLEANING).	CONTRACTOR TO PICK UP WHEN MIXED QUANTITY OF 40 DRUMS OF LIQUID WASTES ACCUMULATE.

# INDUSTRIAL LIQUID WASTE INVENTORY (CONTINUED)

ITEM	DESCRIPTION	QUANTITY	FREQUENCY	PICK-UP POINT	CONTAINER	DESCRIPTIVE ANALYSIS	REMARKS
4.	<u>SOLVENT BASE PAINT</u>	1,000 GAL/YEAR	(4) 55-GALLON DRUMS EVERY 3 MONTHS	DRUM STORAGE & DISPOSAL COLLECTION AREA	55-GAL. STEEL DRUM WITH BUNGS	WASTE ALKYD OR ACRYLIC PAINTS APPROXIMATELY 50% SOLIDS, 50% THINNER FROM FLOWCOAT TANK CLEANING OR FROM PAINT POTS.	CONTRACTOR TO PICK UP WHEN MIXED QUANTITY OF 40 DRUMS OF LIQUID WASTES ACCUMULATE.
5.	<u>SOLDER FLUX</u>	1,000 GAL/YEAR	(3) 55-GALLON DRUMS PER MONTH 6 TIMES PER YEAR	DRUM STORAGE & DISPOSAL COLLECTION AREA	55-GAL. STEEL DRUM WITH PLASTIC LINER	70% FLUX & 30% N-PROPYL ALCOHOL, FLUX CONTAINS CHLORIDE & FLUORIDE SALTS.	CONTRACTOR TO PICK UP WHEN MIXED QUANTITY OF LIQUID WASTE ACCUMULATE.
6.	<u>LIQUID SLUDGES MISC.</u>	24,000 GAL/YEAR	2,000 GALLONS PER MONTH	CONCRETE PITS DRUM STORAGE & DISPOSAL COLLECTION AREA	55-GAL. OPEN END DRUMS	APPROXIMATELY 50% SLUDGE CONSISTS OF SULFATE AND OTHER ACID SALTS IN CONCRETE PITS, 50% SLUDGE OF PHOSPHATE SALTS FROM ZINC PHOSPHATING MACHINE. ALSO, MISCELLANEOUS SLUDGES.	DRUMS CONTAINING SLUDGE MUST BE COVERED BY CONTRACTOR BEFORE MOVING OFF PROPERTY.
7.	<u>WASTE OILS</u>	320,000 GAL/YEAR	(2) 3500-GALLON TRAILERS PER WEEK	CARLYLE COMPRESSOR COMPANY	CONTRACTOR FURNISHED CONTAINER	MIXTURE OF WATER EMULSION COOLANTS AS IN ITEM NUMBER 2 CONTAMINATED PETROLEUM OILS, ETC.	CONTRACTOR TO PROVIDE AND SPOT TANK TRAILER OR OTHER CONTAINER ON SITE FOR COLLECTING OF WASTES AND REMOVE AS REQUIRED.
	<u>WATER EMULSION</u>	4,000 GAL/YEAR	4,000 GAL ONCE PER YEAR	CARLYLE COMPRESSOR COMPANY	55-GAL. STEEL DRUM WITH BUNGS	APPROXIMATELY 7% OF RESINS AND PIGMENT IN WATER.	PAINT IS PUMPED FROM ELECTRO COATING MACHINE APPROXIMATELY ONCE PER YEAR. SYSTEM BECOMES UNBALANCED.

FEBRUARY 10, 1978

TO UPPER  
THOMPSON RD. EXIT NUMBER 33

TO NY 3 THRUWAY

CARRIER  
CIRCLE

ROUTE  
290 WEST

NORTH

ROUTE 290 EAST

TR-2

TR-3

CONCRETE PITS (2)  
WEST - TR-1

CONCRETE PITS  
(1)-NORTH OF  
TR-6

NORTH

TR-4


TR-5

TR-19

TR-20

DRUM STORAGE AND  
DISPOSAL COLLECTION  
AREA

COMPRESSION BLDG.  
CARLITE COMPRESSION COMPANY

	
SITE PLAN - INDUSTRIAL LIQUID WASTE PICK-UP POINTS	
SCALE: 1" = 100' DATE: 11-17-88 BY: [signature]	DRAWN BY: [signature] CHECKED BY: [signature]

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

CITY OF NEW YORK,

v.

EXXON, et. al.

85 Civ. 1939 (KC)

AFFIDAVIT OF JOSEPH S. PETA

STATE OF FLORIDA )

ss.

COUNTY OF MARION )

JOSEPH S. PETA, being duly sworn, deposes and says as follows:

1. I reside at 906 Second Street, Liverpool, New York 13088. During the winter, I live at 302 Oak Track Way, Ocala, Florida 32672. I am over 21 years of age.

2. I make this affidavit on the basis of personal knowledge. I do so in order to set forth my knowledge of the disposal of certain Carrier Corporation wastes in the 1970s.

3. During the 1970s, I owned and operated a business called Joseph S. Peta Trucking at 3641 Hayes Road, Liverpool, New York. Liverpool is a suburb of Syracuse. My company was a small trucking and construction concern specializing in the delivery of sand, gravel, and topsoil. We had several dump trucks and backhoes, and fewer than ten employees, including myself and my son, John M. Peta.

4. For insurance reasons, we operated almost exclusively in the Syracuse area. Our insurance policies in force through

the 1970s required us to operate within a fifty-mile radius of our office in Liverpool.

5. At some time in the early 1970s, Northeast Oil in Syracuse hired my company to pick up drummed waste from Carrier Corporation's Thompson Road manufacturing plant in Dewitt, New York, a suburb of Syracuse. This arrangement lasted until 1979. At no time did I or my company pick up drums from Carrier's Carlyle Compressor plant.

6. Pursuant to my subcontract with Northeast, I and my son or another employee would drive to the Thompson Road plant to pick up the drums for which Northeast was responsible under purchase orders from Carrier. We made these pick-ups as many as several times a year from 1974 until some time in 1979. (I believe Northeast later changed its name to Hudson Refining.)

7. We used dump trucks to carry the drums. Carrier employees used forklifts to load them in our trucks. ~~The drums were normally sealed.~~ JLP

8. On no occasion did we pump out the drums at Carrier. We had neither the pumping equipment to do so nor a tanker truck to hold the materials in the drums.

9. We brought the drums back to our property in Liverpool where we sorted them according to their condition. Most of the drums could not be returned to service. These drums were taken, still full, to the Town of Salina landfill and lawfully disposed of with their contents. (Salina is a Syracuse suburb.) We sold the remaining drums for use as floats and for other marine

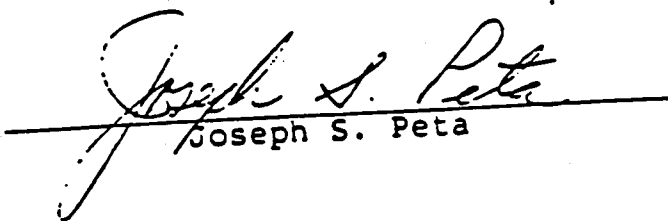
applications. We usually disposed of them in the Salina landfill before we sold these drums. To my knowledge, such disposal was lawful.

10. On no occasion did I, my son, or any employee of mine ever transport drummed wastes from Carrier or anything else to any New York City landfill.

11. On no occasion did I, my son, or any employee of mine ever transport drummed wastes from Carrier or anything else to Hi-Way Auto Service in Pittston, Pennsylvania.

12. On no occasion did I, my son, or any employee of mine ever transport drummed wastes from Carrier or anything else to the waste oil refineries located at Review Avenue, in Long Island City, New York, or located on River Road, in Edgewater, New Jersey.

13. On no occasion did I, my son, or any employee of mine ever transport Carrier's drummed wastes or anything else from Carrier to the waste oil refinery on Lodi Street in Syracuse or any other Northeast facility. On no occasion did any truck from Northeast Oil or any other concern pump out any of the drums my company had picked up from Carrier.

  
Joseph S. Peta

Subscribed to and sworn before  
me this 26th day of  
February, 1988

  
Sandra S. Baker  
Notary Public

Notary Public, State of Florida  
My Commission Expires Sept. 9, 1990  
NOTARY PUBLIC STATE OF FLORIDA

CITY OF NEW YORK,

v.

EXXON, et. al.

85 Civ. 1939 (KC)

DECLARATION OF JOHN M. PETA

JOHN M. PETA, pursuant to 28 U.S.C. §1746, makes the following declaration under penalty of perjury:

1. I reside at 302<sup>nd</sup> Oak Track Way, Ocala, Florida 32672.  
303  
I am over 21 years of age.

2. I make this declaration on the basis of personal knowledge. I do so in order to set forth my knowledge of the disposal of certain Carrier Corporation wastes in the 1970s.

3. During the 1970s, I worked for a business called Joseph S. Peta Trucking located at 3641 Hayes Road, Liverpool, New York. Liverpool is a suburb of Syracuse. This company was owned and operated by my father, Joseph S. Peta. It was a small trucking and construction concern specializing in delivery of sand, gravel, and topsoil. We had several dump trucks and backhoes, and fewer than ten employees, including myself and my father, Joseph S. Peta.

4. For insurance reasons, we operated almost exclusively in the Syracuse area. Our insurance policies in force through the 1970s required us to operate within a fifty mile radius of our office in Liverpool.



5. At some time in the early 1970s, Northeast Oil in Syracuse hired my father's company to pick up drummed waste from Carrier Corporation's Thompson Road manufacturing plant in Dewitt, New York, a suburb of Syracuse. This arrangement lasted until some time in 1979. At no time did my father's company pick up drums from Carrier's Catlyle Compressor plant.

6. Pursuant to the subcontract with Northeast, I and my father or another employee would drive to the Thompson Road plant to pick up the drums for which Northeast was said to be responsible under its purchase orders from Carrier. We made these pick-ups as many as several times a year from 1974 until 1979. (I believe Northeast later changed its name to Hudson Refining.)

7. We used dump trucks to carry the drums. Carrier employees used forklifts to load them in our trucks.

8. On no occasion did we pump out the drums at Carrier. We had neither the pumping equipment to do so nor a tanker truck to hold the materials in the drums.

9. We brought the drums back to our property in Liverpool where we sorted them according to their condition. Most of the drums could not be returned to service. These drums were taken, still full, to the Town of Salina landfill and disposed of there with their contents. (Salina is a Syracuse suburb.) We sold the remaining drums for use as floats and for other marine applications. We usually disposed of the contents of these drums in the Salina landfill before we sold these drums. To my knowledge, such disposal was lawful.

10. On no occasion did I, my father, or any employee of my father's company ever transport drummed wastes from Carrier or anything else to any New York City landfill.

11. On no occasion did I, my father, or any employee of my father's company ever transport drummed wastes from Carrier or anything else to Hi-Way Auto Service in Pittston, Pennsylvania.

12. On no occasion did I, my father, or any employee of my father's company ever transport drummed wastes from Carrier or anything else to the waste oil refineries located at Review Avenue, in Long Island City, New York, or located on River Road, in Edgewater, New Jersey.

13. On no occasion did I, my father, or any employee of my father's company ever transport Carrier's drummed wastes or anything else from Carrier to the waste oil refinery on Lodi Street in Syracuse or any other Northeast facility. On no occasion did any truck from Northeast Oil or any other concern pump out any of the drums my father's company had picked up from Carrier.

Pursuant to 28 U.S.C. § 1745, I declare under penalty of perjury that the foregoing is true and correct.

John M. Peta  
John M. Peta

Date: March 3, 1988  
Ocala, Florida